The New England
Journal of Medicine

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Volume 247 SEPTEMBER 18, 1952 Number 12

RESETTLEMENT OF REFUGEE PHYSICIANS IN THE UNITED STATES*

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WHEN large population groups are expelled from their homelands, the problem of their resettlement is always difficult. Not only must the people thus displaced become reoriented in communities where language and general customs differ from their own, but also they must fit their varied skills into the patterns of application practiced in the new land. They must cultivate new habits and new technics and even at times new ideals and attitudes toward their jobs, their colleagues and their communities. Although these differences relate principally to superficial matters and the basic virtues and vices are much the same throughout the civilized world, differences in habits, customs and interpersonal relations are sufficiently marked, especially when added to the necessity of mastering a foreign language, to make the way of the immigrant a difficult one and the value of a helping hand hard to overestimate.

In this confused and sometimes baffling situation the position of the medical profession is unique. Fundamental medical knowledge is universal in civilized countries, and throughout the world doctors in this sense "talk the same language." Despite differences in the methods of furnishing medical care to the public and differences in customs and organization, basically both the science and the art of medicine are the same throughout the world. In contrast to the lawyer, for example, who necessarily would be wholly at sea in dealing with problems in the courts of most foreign countries, the doctor can step into a hospital, an operating room or a clinical laboratory anywhere and, though he may not understand a word of the language that is being spoken, know exactly what is going on.

These considerations, one might suppose, would lead to the conclusion that the way of the immigrant physician is an easy one. Unfortunately, such an assumption is by no means justified. Besides the language barrier, which may not be present or, if present, is usually readily overcome, and also the social and economic difficulties that are problems to all newly arrived refugees, there are special situations that face the doctor and make his eventual resettlement in the practice of his profession a matter of the utmost difficulty. Chief among these and the most difficult hurdle that confronts the physician is the satisfaction of the requirements of the state licensing boards — difficult and, indeed, in more than half the country, impossible. It is my purpose to discuss at some length this matter of the licensure of foreign physicians.

The standards and requirements of these boards are, of course, based primarily on their duty under the law to protect the public from exposure to the ministrations of poorly trained and incompetent physicians. Unfortunately, however, other factors considerably less praiseworthy come into play. That there is reason to doubt the sincerity of many state boards and their devotion to the high ideals that they proclaim will, I believe, be evident from a discussion of the obstacles that they place in the way of well qualified immigrant colleagues — colleagues, it should not be forgotten, who have undergone terrible suffering in making their escape from the forces in the world that are the common opponents of a free society.

Before state licensing boards and the laws and regulations under which they operate are discussed one should consider the people themselves: the refugee doctors with whom these boards have to deal. These conveniently may be divided into four main groups:

Early medical refugees. These consist of physicians who fled from Nazi persecution before the war.

"*Displaced persons.*" These are the physicians of the various national groups rendered homeless during the war by Nazi or Communist armies and driven into Western Germany, Austria and Italy as fugitives. These people have been under the care of the International Refugee Organization and have been admitted to the United States under the special "D. P." laws passed by Congress.

*Presented at a meeting of the American Federation of International Institutes, as a part of the National Conference of Social Work, Chicago, May 29, 1952.

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Recent graduates. These are younger people, most of them members of the "D. P." group, and some of other origin, whose training in medicine was completed during or after the war when medical-school programs and facilities were not, in most cases, up to their former standards. These physicians present a particularly difficult problem.

Expellees. These are the doctors among the 10,000,000 people judged to be of German ethnic origin and expelled by the Russians from their homelands into Western Germany. The entry of 54,744 of these people has already been authorized by Congress under the amended "D. P." law of 1948, and a large number, probably more than half, have already reached this country. If the legislation urged by President Truman becomes law, a total of 300,000 people will be admitted during the next three years, a number almost as great as the number of displaced persons (336,000) who have come to this country under the program completed December 31, 1951. The number of mature physicians in this group must be considerable. Their resettlement represents the problem of the immediate future.

In addition to these four groups, who can properly be considered as "refugees," there are *émigrés* from England, France, the Netherlands and other European countries, some from India and the Middle East and a group of older German-trained physicians (really refugees) who fled before the war and have been practicing in China. Without further discussion of these doctors, most of whom have full documentation and who do not present any unusual problems, one should consider the four main groups of foreign-trained physicians referred to above, because the problem of resettlement and re-establishment in the work of their profession is not the same for each group.

Early Refugees

These physicians are now resettled. As early as 1933 they began to arrive in the United States, and help was extended to them by a small committee of physicians in New York motivated by the desire to aid unfortunate colleagues. For the most part these refugee doctors were mature and well trained; a number of them were teachers and investigators, and at the present time some of them hold positions of high responsibility in medical schools and hospitals and have made excellent contributions to the progress of American medicine.

A striking example of successful resettlement of a member of this group is afforded by a young Jewish refugee whose final examinations at the University of Vienna were interrupted by Hitler's forces, who threw him into Dachau Concentration Camp. After eight months in that place he was allowed to leave by reason of an American "assurance," and reached this country in 1939, without knowing a word of English, without a medical degree and without a cent of money. That man today is a certified specialist in internal medicine, married, the father of two children, a veteran with a year of Army service in Japan, and a prominent practitioner in one of the larger cities.

In this connection the work of the National Committee for Resettlement of Foreign Physicians should be mentioned; an outgrowth of the informal committee of New York physicians, to which reference has been made, it was formally organized in 1939. It has "maintained its identity through a series of changes in the organizational structure of its parent body, which first became the National Refugee Service, then the United Service for New Americans, and, since July, 1949, the New York Association for New Americans." This statement is quoted from a report on "Refugee Physicians in America" furnished to me by Mrs. Laura G. Rubin, the efficient secretary of the National Committee, to whom I am indebted for many of the other facts and figures that I shall present.

Regarding this National Committee, a few pertinent facts are worthy of note. It is the only voluntary agency devoted specifically to the aid of the foreign physician in the difficult problem of his resettlement. Its financial support is 100 per cent from the United Jewish Appeal. Its work is nonsectarian. In dealing with the group of early refugees, it was extending its services to a clientele predominantly Jewish, but the equally thorough and efficient help given to physicians since 1946 has, especially in the last two or three years, been afforded to doctors of whom the majority are not Jewish. This record of humanitarian idealism should be a source of pride to all Americans.

"Displaced Persons"

This second category contains the doctors who, with their countrymen, were precipitated into Western Germany and neighboring countries, at first by the Nazis and later by the Russians. Here again, as with the early refugees, one is dealing to a great extent with well trained, seasoned practitioners — the doctors of the population groups to which they belonged. Among them were also a number of very recent graduates and students, who later completed their studies in Western Germany, Austria or Italy. These are considered with the next group, the recent graduates, who present a different problem to American licensing authorities. The older physicians, those who so ably carried the burden of practice and preventive medicine in the D. P. camps, all were certified for this work by committees of distinguished colleagues appointed by the I. R. O. (International Refugee Organization).

The *I. R. O. Medical Register*, published in 1948, contains the list of 2570 physicians together with

the pertinent facts regarding the personal status and training of each. Of this group 840 were at that time between the ages of thirty-six and forty-five; 999 were over forty-five, and of these, 303 were over fifty-five. Thus, it is clear that one is dealing with mature doctors. For many of these the taking of examinations would be difficult, and the burden of serving as interns almost impossible.

Of these physicians 1616 were listed as general practitioners, and the remainder as specialists (Table 1). Among the group there were 40 full professors, 15 associate professors and 26 docents (lecturers).

Of course, these doctors have not all come to the United States. That a large proportion of them, however, have done so is shown by the fact that the National Committee has a record of 2250 foreign physicians who have arrived in the United States since the end of World War II, and the great majority of these were registered D. P. doctors. Some, however, went to other countries, in but few of which they have been allowed to work at all as physicians. In Australia, for example, there are 500 D. P. doctors, many of whom are specialists but none of whom, I am told, have been allowed to practice. It is pathetic to think of a man who was a teacher and leader of medicine in his own land doing unskilled labor for his living, but there are many instances of this in Australia, and a few, I regret to say, in this country.

Recent Graduates

Among the younger displaced persons in Western Germany, where technical training in other lines was hard to obtain, a large number turned to medicine. Many of these had previously been interrupted in their medical studies in their own lands and were able to resume and complete them after they had reached the D. P. camps. Because of the disruption of medical faculties and the destruction of equipment occasioned by the war, the training afforded to these young people has been, on the whole, below standard. Thus it is that they present a special problem to state licensing boards, most of which have ruled that graduates of foreign schools, who obtained their degrees subsequent to the year 1940, will not be admitted to their examinations. The American Medical Association has published a list of foreign schools whose graduates are acceptable on a par with those trained at American and Canadian schools, and this list is gradually being extended as evidence of adequacy of the work of foreign schools is accumulated. The difficulties in dealing with the graduates of these schools involve not only the younger physicians of the D. P. group but also some of the younger German expellees and others (including a not inconsiderable number of American students who had failed to gain admission to American medical schools and had taken their training abroad).

New York University has taken a forward step by organizing a course for foreign-trained physicians, which has been established with the co-operation of the New York State Board. Those who complete this course successfully, it is understood, not only will be well oriented to American Medicine, but also will be acceptable to the New York licensing board. To Dr. Irving Graef, who is the chairman of the Medical Advisory Board of the National Committee, and probably knows more about the retraining and resettlement of foreign physicians in America than any other person in the country, goes a great deal of the credit for the establishment and operation of this course.

Table 1. *Refugee Physicians, June, 1948.*

Specialty	No. of Physicians
General practice	1,616
Internal medicine	157
General surgery	135
Gynecology and obstetrics	129
Pediatrics	88
Stomatology	66
Dermatology and venereal disease	52
Neuropsychiatry	52
Ear, nose and throat	51
Ophthalmology	50
Bacteriology and protozoology	42
Tuberculosis	36
Radiology	29
Pathology	15
Urology	12
Tropical medicine and hygiene	11
Anatomy and histology	10
Orthopedics	8
Pharmacology	4
Physiology and biochemistry	4
Forensic medicine	3
Total	2,570

All foreign-trained physicians should, in my judgment, receive a year or more of hospital experience to allow them to become accustomed to the methods, customs and basic attitudes of medical practice in America. This matter will be discussed further.

Expellees

If the legislation urged on Congress by President Truman becomes law and 300,000 "ethnic Germans" are admitted to this country in the next three years, the problem of their resettlement will be essentially the same as that of the "D. P." physicians: one will again be dealing with the medical personnel of a large population group, for the most part established and experienced practitioners, including a number of specialists and teachers. It is to be hoped that the experience gained in aiding in the resettlement of the "D. P." doctors will result in a better job.

That there is a real need for more physicians in this country is my sincere belief. Studies, surveys and arguments pro and con have resulted in a confused picture that is difficult of interpretation. Certain it is that in many rural areas in parts of the

West and the deep South there is a real shortage, and from many communities have come appeals for doctors, D. P. physicians or others to be sent to take care of the needs of the people. Yet it is in these very areas that the admission of the medical refugee is barred. What is the explanation? It must be regretfully admitted that a provincial spirit of distrust of "foreigners" prevails, and a fear lest the establishment of these newcomers in practice result in the loss of patients by native physicians, an attitude that at times is almost "dog in the manger" (and ill befits the descendants of immigrants). Such an attitude is noted particularly in many of the county medical societies; and the organization of the American Medical Association is such that majority opinion in the constituent assemblies, the county societies, is fairly sure to be unanimous opinion in the houses of delegates of the state and national associations. This would be excellent except for the fact that no real opportunity for the development of a strong minority, a "loyal opposition," exists, and the attitudes and opinions at the top are bound to reflect those developed at the "grass roots." Nevertheless, in the matter of dealing with refugee physicians, it is good to realize that the American Medical Association has gone on record as urging the state licensing boards to modify their regulations, to allow for the admission into practice of the better qualified of these unfortunate colleagues.

It has been complained that refugee doctors refuse to settle in country districts. In view of the fact, pointed out above, that most of the states where such physicians are greatly needed in rural areas bar them from admission, it is not surprising that many of them congregate in cities. Nevertheless, the following quotation from the report of the secretary of the National Committee, shows that this is by no means the rule:

> A limited number of those physicians already licensed have been steered into small rural communities . . . from up-state New York to as far west as Missouri, where communities were without medical care. . . . An example of the way this program has worked out in action is admirably presented by a young physician, who is now entering his third year of practice in an up-state village in New York. The residents of the village had been without a physician for several years, and were more than eager to acquire medical care. They purchased a home for the physician who, like most of his foreign colleagues, had come to this country virtually without resources. Within a short time the newcomer had established a practice whose income sufficed to support his family and even left enough over to begin systematic payments on the home his neighbors had bought for him.
>
> There is a brief footnote to this story which tells how completely the former foreign physician responds to the warmth and kindliness with which his village neighbors welcomed him. . . . He was treating the wife of a farmer, who lived several miles outside the village, and visited her many times a week although each trip over the rural roads involved hours of time and considerable inconvenience. Modest as his fees are, the farmer was scarcely in a position to pay them, and the villagers very well knew it. They gathered a purse among themselves and presented it to the physician, because they knew it had not been easy for him to make ends meet. They later learned from the farmer that the physician had given him the entire sum, with the wish that it might help his wife get well faster.

It is only fair to admit that there is an occasional "bad actor" among the "D. P.'s" — and among the D. P. physicians. The unfavorable impression that such a person makes (and I am sure that an equal number of such persons could be found among the American people and medical profession) is likely to offset the good work of a large number of honest, hard-working colleagues. Very little impression, as one knows from Holy Writ, is made by the "ninety and nine who need no repentance."

What then about the state licensing boards and their rules and regulations, which debar refugee doctors from admission to practice? Table 2 indicates the limited opportunities for licensure.

As of January, 1952, the records of the Committee, which has, since 1946, interviewed 1707 D. P. doctors, show that one or more of them have been licensed in the following thirteen states and territories: California, Connecticut, New York, Illinois, Ohio, District of Columbia, Washington, Indiana, Missouri, Maryland, Minnesota, Hawaii and the Virgin Islands. Most of these are in New York, Connecticut, Illinois and Ohio.

TABLE 2. *Regulations for Acceptance of Displaced Physicians in 48 States and 5 Territories.*

REGULATION	NO. OF STATES
"Not accepted"	22
Citizenship required	20
First papers required	8
Internship required	20
"Further training" required	7
Examination required	53

There are displaced physicians working in state hospitals in West Virginia, Rhode Island, Connecticut, New York, Pennsylvania, Illinois, Colorado, Ohio and Kentucky. Texas, Maine, Missouri, South Dakota, Minnesota and New Jersey have also given employment to an occasional doctor of this group.

In certain states regulations, or statutes, have been introduced by which satisfactory service of three years in a state institution has been made equivalent to an internship in completing the eligibility of the doctor for the examination, and in at least one state it is understood that such service may be taken as the equivalent of an examination. In another state the employment of displaced physicians in state hospitals has been discontinued because of the disappointing work of these doctors, a circumstance that may be explained by the fact that they were engaged "sight unseen," with no attempt to determine their suitability for the jobs that they were given, and, what is more important, without their having mastered the English language.

So far as the language requirement is concerned, it is, in my judgment, essential that every displaced physician attain a reasonable fluency in English before he is employed in the care of patients. The average D. P. doctor speaks four languages, and in a large number of cases one of the four is English. A doctor who cannot converse fairly freely in English should be kept in touch with medical affairs by attendance at meetings and access to the library, should be given minor laboratory work that he can do as a volunteer, and should be advised to concentrate on overcoming his language deficiency as quickly as possible.

Regarding hospital training, I believe that every foreign-trained physician should have at least a year in an American hospital for orientation in American medical methods, customs and attitudes. When it comes to the question of very recent graduates of unapproved foreign schools, I believe that further training is even more essential; courses such as that presented by New York University or matriculation in an American medical school offer the best method of correcting the deficiency in basic training.

The taking of the written examinations in a foreign language, and in a manner that to the European-trained physician is entirely strange, is an obstacle that is particularly difficult for the older refugee physicians to surmount. I am acquainted with a very capable physician, the former dean of a famous medical school in a European country, who, having served an internship and a residency in an American hospital, has twice failed his examination for licensure. Similar results have led to discouragement, depression and, in the case of at least one physician, to suicide.

Time does not allow a detailed discussion of the requirements for licensure — state by state. These are subject to some changes from year to year, and have rarely been somewhat liberalized. In certain states, notably Massachusetts and Pennsylvania, where, on paper, the requirements appear reasonable, certain special regulations are in force that are calculated to block the admission of a large proportion of the doctors of the D. P. group. The most flagrant of these is the rule enforced by the Massachusetts Board that every foreign physician must present, in addition to his other credentials, a statement signed by the *present* dean of his medical school to the effect that he is a bona-fide graduate of that school. For former students of universities now behind the "iron curtain," to obtain such a statement is obviously impossible, and the requirement constitutes a subterfuge to bring about the general exclusion from the state of the bulk of the D. P. physicians. This certainly suggests political influences quite at variance with the "American tradition" of which so much is said but, in relation to these unfortunate anti-Nazi and anti-Communist colleagues, so little is done.

If I were to be asked to state appropriate requirements for a state board to impose on foreign-trained physicians of the D. P. group, I should feel somewhat qualified to do so, by reason of previous service on the licensing board of my own state as well as broad acquaintance with foreign-trained physicians and their problems. My suggestions for requirements would be about as follows:

"First papers" — not full citizenship.

Documentation or reasonable evidence of graduation from a reputable medical school, including many not yet on the A. M. A. approved list. (Extra training of some sort would be required of those whose medical courses were more than one fourth completed after 1942.)

One year of approved internship, residency, or fellowship — or, in lieu of this, two or three years in a hospital whose internship or residency is not on the approved list, but is approved by the state board (for example, a state hospital).

A reasonably fluent knowledge of English.

I would further suggest that the state board devise an oral type of examination to be given to older foreign-trained physicians. I would also require of the state board that it maintain in all its dealings with the refugee doctors an attitude of friendship and helpfulness that would inspire confidence on the part of the newly arrived physicians in America and American ideals — an attitude that is obviously appropriate in dealing with the victims of persecution by the opponents of those ideals toward colleagues who have suffered much and are 100 per cent on the American side.

RECENT EXPERIENCES WITH ACUTE PERFORATION OF PEPTIC ULCERS AT THE MASSACHUSETTS GENERAL HOSPITAL

A Review of 288 Cases

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BOSTON

THIS review of acute gastroduodenal perforations is the third in a series representing the experience at the Massachusetts General Hospital. Richardson,[1] in 1917, reported 103 cases from 1896 to 1915, with an over-all mortality of 44.2 per cent. Ulfelder and Allen,[2] reviewed the 334 cases from 1916 to 1940. The mortality in that series was 27.2 per cent. This paper covers the 289 perforations seen from 1940 through 1951, in which the mortality dropped to 9.34 per cent.

The data presented below are not at variance with those in several recent reports, but it is of particular interest to examine the possible factors in such a significant decline in mortality as compared with the earlier experience at the same institution. The wide range of recently reported mortalities in this disease (from Baritell's[3] 1 per cent to Luer's[4] 28.2 per cent) is difficult to explain, but one must take into account differences in hospital clientele, particularly the older age groups, diagnostic criteria, conditions delaying diagnosis and treatment, and the quality of medical therapy. As pointed out below, the mortality figure reflects a large element of chance since many deaths are not the direct result of perforation.

The material for this study was extracted from records of hospital patients and a review of all cases in which an intraperitoneal perforation was suspected. Cases in which the diagnosis was in doubt were excluded, as were those in which perforation of another viscus or of an operative anastomosis were proved. A total of 289 perforations in 288 patients were tabulated. The diagnosis was proved either at operation or at autopsy in all but 16 cases, and in these there was clinical evidence, including demonstration of subdiaphragmatic air on x-ray study, to establish the diagnosis beyond any reasonable doubt.

Diagnostic x-ray films of the abdomen with the patient in the upright position were taken in 193 cases (66 per cent). This procedure has been used less in recent years. It is our opinion that the additional time and extra manipulation involved are not warranted except where the diagnosis is in doubt. The reliability of this test is also difficult to estimate, and it is our impression that haste, late hours and inexperienced technicians often do not permit fair evaluation of the method. Nevertheless, free air in the peritoneum was reported in 122, or 63 per cent, a negative report in 54 (27 per cent) and an unsatisfactory report in 18 (10 per cent) of the x-ray films taken.

There were 257 males and 31 females, a ratio of 8.3:1. This figure is comparable to those in some recent reports and is about the same as that of duodenal ulcer in general. The mortality in women is about one and a half times the total figure.

The average age in the whole series was forty-seven and eight-tenths years; the youngest patient was sixteen, and the oldest eighty-three. The average age in the fatal cases was higher, sixty and a half years, but 7 patients were below fifty and 1 was thirty years old. Of greater significance is the fact that of the 68 patients who were sixty or more years old there were 50 survivors, 3 of whom were over eighty. Figure 1 presents the distribution of cases by age, with the mortality in each group. Figure 2 represents the mortality curves by ages in this study and in the two previous reviews. Not only has the level dropped but also an additional decade group has been included with each subsequent report.

Of 261 survivors, 204 (78 per cent) had uncomplicated convalescence and an average hospital stay of thirteen and one-tenth days. The 60 patients in whom complications developed were distributed freely through all age groups, average fifty and a half years, which is close to the average age of the entire group. Of 61 complications tabulated, infection accounted for 29, and most of the remainder were pulmonary complications. There were 15 intraperitoneal abscesses, 7 wound abscesses, 4 pulmonary infections and 3 cases of urinary infection. Pulmonary infarct and atelectasis together numbered 18. Six developed pyloric obstruction and required further surgery at the original admission as did one case of hemorrhage from the ulcer. Dehiscence of incisions occurred in 2 patients and phlebitis in 5 (treated by ligation of the superficial femoral vein), and 1 patient had congestive heart failure.

Interestingly enough, there does not seem to be significant correlation between any of the factors tabulated and the incidence of complications. The delay from perforation to operation was slightly greater in cases in which intraperitoneal and incisional abscesses developed, as might have been expected. Pulmonary complications were not noticeably influenced by the type of anesthetics or

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by the time of year, as in the series of Ulfelder and Allen.[2] Almost all the patients with septic complications had received some form of chemotherapy.

Of the 289 cases of established acute perforation, 27 resulted in death on that admission, an over-all mortality of 9.34 per cent. Among the 251 patients operated upon there were only 12 deaths, a mortality of 4.48 per cent. Although this latter figure is significant, it is of interest to analyze this group and discover a more encouraging outlook. Liver failure, renal failure, hemorrhage and anesthesia each accounted for 1 death, and it is probably fair to say in every case that the perforated ulcer was only indirectly responsible. Eight deaths were attributed to infection: 1 overwhelming urinary infection, 2 cases of pneumonia and 5 cases of peritonitis. Two of these patients were operated on late (five and thirteen days after perforation) and technically might be excluded from the group operated on. One had been treated conservatively, and a late tension pneumoperitoneum developed; in the other, perforation was an incidental finding at elective gastrectomy. Five of the remaining 6 patients who died of sepsis did not receive any chemotherapy. Thus, only 1 death occurred directly from perforation in the group operated on early and given adequate chemotherapy, a mortality of less than 0.4 per cent. This suggests that the primary problem approaches solution and that the remaining mortality is a function of late diagnosis, inadequate treatment or secondary disease.

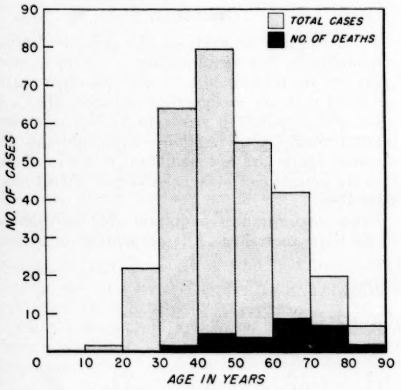

FIGURE 1. *Distribution of Cases and Mortality by Age Groups.*

Thirty-six patients were considered to be unsuitable candidates for surgery, and 15 of these cases resulted in death, a mortality of 41.4 per cent. In these fatal cases all but 4 patients were over sixty years of age, the average being sixty-six and eight-tenths years, whereas among the 21 survivors all but 5 were under fifty, the average being forty-six and two-tenths. Every death in this group was attributed to peritonitis, which was proved at autopsy in all but 2 cases. Again, the discouragingly high figure is worthy of analysis, and distinction should be made between patients receiving adequate conservative therapy and those who either arrived moribund or were not properly treated.

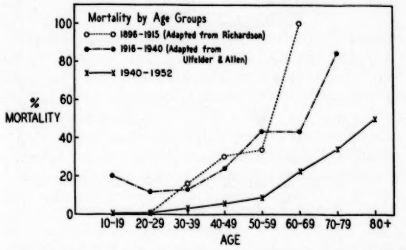

FIGURE 2. *Mortality According to Age in Present Study and in Those of Richardson[1] and Ulfelder and Allen.[2]*

Nine of these patients were admitted either moribund or in the advanced stages of peritonitis. Seven of these died within fifteen hours of admission, and the other 2 on the fourth hospital day. Of the remaining 6, none received prompt chemotherapy, and the diagnosis was not established ante mortem in 3. Thus it may be said that no deaths occurred after early adequate chemotherapy. It is true that only 16 of the 21 survivors who were not operated on received early adequate chemotherapy, but all were given gastric suction, blood and fluids parenterally. Three intraperitoneal abscesses and 1 wound abscess represented the only complications among the 21 survivors.

It was not until late in 1939 that any form of chemotherapy was available for patients with acute gastroduodenal perforations, and it was not until 1940 that this group began receiving chemotherapy consistently. In that year sulfanilamide, and later sulfapyridine, was placed in the peritoneal cavities and wounds of these patients in doses of 3 to 10 gm. (Fig. 3); this practice was discontinued by 1944. Parenteral administration of sulfathiazole or sulfapyridine and later sulfadiazine, in doses of 2.5 to 5.0 gm. daily, was used increasingly from 1940 to 1945. Since that time penicillin, 96,000 to 2,000,000 units a day, has been given in almost every case. Since 1948 streptomycin has also been employed in nearly every case, the usual dose being

2 to 4 gm. daily. It is of interest that there was little difference in mortality between the "sulfonamide era," 1940-1945, and the "penicillin era," 1945-1952, either in the over-all figures or in the groups operated on (Table 1). However, there were 18 septic complications in the first five-year period and only 11 subsequently. The added effect of

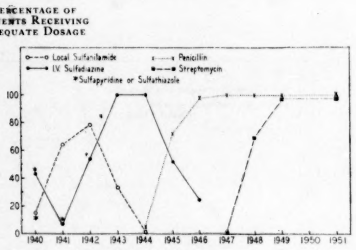

FIGURE 3. *Patients Receiving Chemotherapy.*

streptomycin is still hard to evaluate. Certainly, the operative mortality rate has been lower since the introduction of streptomycin.

The bacteriologic cultures taken at operation grew out a variety of organisms: pneumococcus in 2 cases, hemolytic streptococcus in 35, colon bacillus in 14, Type B hemolytic streptococcus in 10, *Bacillus subtilis* in 7, and no growth in 85. There seems to be no relation between the presence or type of organism and the eventual outcome of the case.

Since the surgical services at the Massachusetts General Hospital still consider early operation the procedure of choice for patients with gastroduodenal perforations, only patients who presented definite contraindications to surgery were treated conservatively. The surgical procedure used in 90 per cent of the cases was closure of the perforation by suture of an omental tab over it. The postoperative treatment was the same as that instituted for the patients not operated on — namely, constant gastric suction from the time the patient entered the hospital until the abdomen became soft and the patient was passing gas, limited oral intake until gas was passed, blood, plasma, and intravenous injection of fluids as indicated, in addition to penicillin and streptomycin.

The time from perforation to operation has long been established as an important factor in the mortality rate. Our figures are so sparsely distributed (Fig. 4) that they have no real significance. It is noteworthy, however, that 73 per cent of patients arrived and were operated on before twelve hours; the mortality was 3.8 per cent as against 18.5 per cent in those whose operations were delayed for more than twelve hours and 41.4 per cent in those not operated on.

Discussion

In attempting to evaluate the possible factors responsible for this significant improvement in mortality we are confronted with multiple therapeutic advances that are reasonably coincident. The advent of chemotherapy seems to be the most important single consideration. Although the individual figures are not significant it is of interest that the annual mortality has changed almost none since 1941.

Other circumstances unquestionably contributed to the lower mortality. A larger number of plasma and whole-blood transfusions were given than in the earlier reviews, especially after the hospital opened its blood bank in 1942. Notable advances in fluid and electrolyte therapy have been made in this period. Anesthesia improved considerably, and undoubtedly this reduced the number of pulmonary complications. In recent days there has been greater use of inhalation anesthesia in contrast to a wider earlier use of spinal anesthesia. These changes have been gradual. Chemotherapy was begun suddenly in 1940, and it was then that the mortality figure dropped.

With such a low operative mortality it is perhaps well to reconsider more extensive surgical procedures

TABLE 1. *Perforations, Operations and Deaths.*

Year	Total Perforations	Total Deaths	Mortality	No. of Operations	Deaths	Mortality
			%			%
1939	—	—	27.2	—	—	—
1940	25	3	12.0	24	3	12.5
1941	33	4	12.1	27	1	3.7
1942	28	2	10.3	24	1	4.2
1943	24	3	12.5	19	0	0.0
1944	20	1	5.0	19	1	5.3
1945	21	3	14.3	19	1	5.3
1946	24	5	20.8	21	2	9.5
1947	23	1	4.3	22	1	4.8
1948	26	1	3.8	24	1	4.2
1949	25	2	8.3	23	1	4.3
1950	17	0	0.0	13	0	0.0
1951	22	2	9.1	17	0	0.0
Averages			9.37			4.48

at the time of the original operation. In most cases a simple closure remains the procedure of choice, since many patients have never had a good trial of medical therapy before the ulcer perforates. There are, however, many cases in which long-standing symptoms or previous complications have provided adequate indications for surgical therapy. In these a subtotal gastric resection or a first-stage procedure at the time of perforation could be done if general conditions were favorable. The 6 patients in this series in whom pyloric obstruction developed and the patient who had hemorrhage during the original admission required a second operation under hazardous conditions.

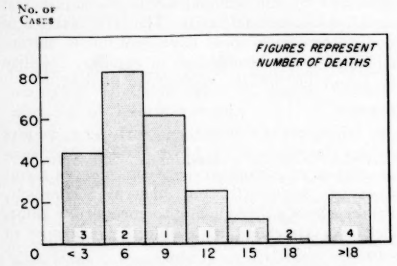

FIGURE 4. *Effect of Interval between Perforation and Operation on Mortality.*

More late complications requiring radical surgery have undoubtedly occurred, but as yet we have no follow-up figures on them. All might have been averted, with probably less over-all risk, by more courageous surgery at the onset.

Summary

Two hundred and eighty-eight cases of perforated peptic ulcer treated at the Massachusetts General Hospital from 1940 to 1952 are reviewed and compared with the cases presented in two previous reports from the same institution.

The total mortality dropped significantly to 9.34 per cent from 27.2 per cent in the previous report. The operative mortality was 4.48 per cent, the nonoperative being 41.4 per cent.

Early operation, adequate chemotherapy, gastric suction, blood and parenteral administration of fluids have virtually reduced the mortality to a function of late diagnosis, inadequate treatment or secondary disease.

By comparison with earlier results the single consideration that appears most important in reducing this mortality is the addition of chemotherapy to the armamentarium of therapeutic agents.

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RUBELLA (GERMAN MEASLES)*

Observations On An Epidemic, With Particular Reference to Lymphadenopathy

First Lieutenant Robert B. Kalmansohn, M.C.†

THE following observations are based on 100 consecutive cases of rubella in patients admitted to the contagious wards of the United States Army Hospital, Fort Belvoir, Virginia, during a two-week period in January, 1952. Comprehensive reviews of this subject have been presented in the past.[1-3] No attempt is made here to duplicate this material, but an effort is made to discuss hitherto undescribed clinical aspects of the disease.

The patients were all male soldiers ranging in age from seventeen to twenty-five. Without exception they were seen in the hospital within twenty-four hours of the onset of the exanthem. In most cases there was a history of measles; however, the type was usually not known. Several patients had experienced rubella or measles, or both, on four or five occasions in the past. No complications developed.

General Appearance

The great majority of patients did not appear ill at the time of the height of the rash. Usually, the patient stated that he felt fine and did not know why he was in the hospital. The patient's general appearance and attitude toward his disease served to help differentiate rubella from measles.

Onset

The onset was usually gradual, with the symptoms and signs of an upper respiratory infection. However, 30 per cent of the patients had the presenting complaint of "knots" in the neck, behind or in front of the ears or under the chin. The lymphadenopathy preceded the onset of the exanthem by approximately seventy-two hours in 6 cases and by approximately forty-eight hours in 4. In the remaining 20 the palpable adenopathy appeared within twenty-four hours of the development of the rash. A few patients were seen on sick call with the so-called characteristic lymphadenopathy of rubella without the rash, and the subsequent development of rubella rash was correctly forecast.

Rash

Exanthem

As others have noted, the rash tended to be kaleidoscopic or polymorphous. Further elaboration here would be redundant.

In 2 cases the so-called rubella ecchymotica described by Ström,[4] of Stockholm, was present. As might have been expected, the rash in these cases did not blanch on pressure and lasted five to seven days instead of the usual one to three days. In 1 case the bleeding time, clotting time, platelet count, peripheral blood smear and capillary fragility as determined by the Rumpel-Leeds tourniquet test were all within normal limits. The extravasation of blood in these cases could have been due to thrombasthenia (pseudohemophilia) or capillary fragility not discernible by the tourniquet method.

Enanthem

No characteristic enanthem was seen despite previous descriptions.[5, 6] Most patients had variable degrees of inflammation of the mucous membranes of the mouth and pharynx. However, several patients complained of soreness of the gums, which was associated with objective evidence of gingivitis.

Ocular Manifestations

Many patients complained of burning of the eyes, but, as others have observed, photophobia was rare. Purulent conjunctivitis was not seen in this series. Contrary to previous observations, palpebral conjunctivitis was more common than orbital conjunctivitis.[1] In 1 patient, a nodular palpebral conjunctivitis was present, giving the sensation of a foreign particle in the eye. The ocular manifestations were not marked.

Cardiovascular Studies

A separate study was undertaken to determine the presence of myocarditis associated with rubella; the complete results will be published in a separate report.[7]

Evidence of myocarditis was sought for on the basis of laboratory studies and careful daily physical examinations. The laboratory studies included daily white-cell and differential counts, daily sedimentation rates (Wintrobe method), and 12 lead electrocardiographic tracings with unipolar-extremity and precordial leads. Physical examination included observation for signs of congestive heart failure, changes in heart beat, rhythm, size and sounds, presence or absence of gallop rhythm and alterations in arterial pressure. Body temperatures were taken two to four times a day.

Laboratory Studies

The total and differential white-cell counts were within normal limits in all 100 patients. The sedimentation rates were likewise within normal limits in all patients, without significant variation.

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In 13 patients 41 electrocardiographic tracings were taken. Various abnormalities are seen in Table 1. In the absence of clinical evidence of myocarditis, these abnormalities must be attributed to bed rest, the known bradycardia associated with viral diseases, the known presence of sinus arrhythmia in the younger age groups, and the presence of premature auricular beats in normal persons in response to certain stimuli.

TABLE 1. *Abnormalities Noted in Electrocardiograms of 13 Patients.*

ABNORMALITY	NO. OF PATIENTS	NO. OF TRACINGS
Right-axis deviation	1	2
Sinus bradycardia	5	8
Sinus arrhythmia	9	23
Premature auricular beats	1	3

Physical Examination

Careful daily examinations of the cardiovascular system gave no clinical evidence of myocarditis in any of the 100 patients, in spite of the abnormalities in the electrocardiograms discussed above.

On the basis of this preliminary study, it appears that frank myocarditis is an extremely rare or unknown manifestation of rubella.

LYMPHADENOPATHY

The presence of lymphadenopathy in rubella has been described by many authors. The chief emphasis has been placed on enlargement of the posterior auricular lymph nodes, the common occurrence of enlargement of the posterior cervical and suboccipital lymph nodes and the occasional occurrence of inguinal and axillary lymphadenopathy.[1-3, 8]

In this series, the 100 patients were carefully examined daily for the presence of adenopathy in the posterior auricular, anterior auricular, anterior cervical, posterior cervical, suboccipital, sublingual, axillary, epitrochlear and inguinal regions. Table 2 demonstrates the frequency of adenopathy in these various locations.

It will be seen that, contrary to the usual concept, enlargement of the posterior cervical was more common than that of the postauricular lymph nodes in this series. The incidence of adenopathy of posterior cervical lymph nodes, which reached 98 per cent in this series, is similar to that observed in measles. Furthermore, the lymph nodes in the postcervical region tended to be larger than those in the postauricular region.

In this series, 80 patients had enlargement of the posterior auricular lymph nodes. Because of the comparative rarity of lymphadenopathy in this location in measles, its presence or absence assumes great differential diagnostic significance.

Enlargement of the anterior auricular lymph nodes was observed in 52 per cent of cases — a finding not previously emphasized; the lymphadenopathy in several cases assumed such proportions that mumps was suggested at first glance; however, the discrete outline of the nodes as well as the absence of a posterior component and other salivary-gland involvement served to differentiate the two conditions.

Sixteen per cent of patients had sublingual lymphadenopathy; in 2 of these, the adenopathy in this location was sufficiently prominent to be the patient's chief complaint during the course of the illness, and the nodes were hard and tender. It is essential to recognize the presence of sublingual lymphadenopathy of this severity in rubella, lest other more serious diagnoses not be favored.

Axillary lymphadenopathy was present in 48 per cent, epitrochlear in 36 per cent, and inguinal in 30 per cent of cases. In none of these patients was the lymphadenopathy prominent subjectively or objectively.

TABLE 2. *Anatomic Location of Lymphadenopathy in 100 Cases of Rubella.*

LYMPH NODE AFFECTED	INCIDENCE OF ENLARGEMENT
	%
Posterior cervical	98
Posterior auricular	80
Anterior auricular	52
Axillary	48
Epitrochlear	36
Anterior cervical	30
Inguinal	30
Sublingual	16

It is noteworthy that the anterior cervical lymph nodes were enlarged in only 30 per cent of the patients; the pharyngitis appeared to be more marked in these cases than in the average case of rubella, and possibly accounted for the enlargement of the anterior cervical lymph nodes.

In all patients the lymphadenopathy receded during the disease concomitantly with the recession of the rash, but was still palpable three to five days after the onset of the exanthem.

SUMMARY

A discussion of 100 cases of rubella occurring in young soldiers in the United States Army is presented.

Hitherto undescribed manifestations are described, with particular reference to lymph-node involvement.

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BOSTON MEDICAL LIBRARY

Report of the Librarian*

HENRY R. VIETS, M.D.

BOSTON

The Librarian herewith presents his annual report to the Boston Medical Library, the fourteenth accounting of the state of the Library since he took office in 1938. This report covers the calendar year 1951, another year of increased use of the Library over 1950 by nearly 8 per cent. The circulation and use of all catalogued items in the Library, now totaling 370,881, was 70,296, a turnover of 18.8 per cent. In other words, for every 37 items on the shelves, 7 were called for in 1951. In view of the large number of historical books and older files of journals in the Library, this is a gratifying use of the property owned by the Fellows of the Boston Medical Library. Attendance figures were also increased to nearly 15,000, and the interlibrary loans to nonmembers to over 2,000.

Since moving into the present building in 1900, the Library has grown from about 62,000 to 370,000 in catalogued books and pamphlets, and from 450 to over 1,000 current periodicals and serials. The Library is thus nearly six times as large as it was in 1900. In the last fifty years, more than 300,000 items have been added. More recently, however, the growth has been at the rate of 3,000 volumes and 2,000 pamphlets a year, a steady intake, with few large accessions at any one time. On the supposition that the Library continues to expand at its present rate, in another fifty years we shall need to find accommodations on our shelves for a quarter of a million more items to add to the third of a million we already have. Who will be responsible for such a Library in 2000 A.D.? Can the few supporting physicians in Boston and its vicinity, who use the Library most, and the Professional Members, plus the members of the Massachusetts Medical Society, carry such a trust and the accompanying financial burden? Even today the Library is falling behind in its duties. Service is minimal, additional stack space is nonexistent, the Library is understaffed and the rare books are inadequately housed, and yet the Library goes on, serving more and more people year by year with more and more material and doing it cheerfully, not infrequently even graciously, and at all times bravely. The resolving of questions of this type poses a challenge to all members of the Massachusetts Medical Society and to the friends of the Boston Medical Library.

One suggestion deserves consideration. The historical collections, particularly the rare books of antiquarian interest, might be separated, with their appropriate funds, from the active, research library and deposited in other quarters more suitable to house and care for them. The Library has already put on "permanent loan" some of its finest pictures. Should not books of unusual quality receive the same consideration?

ACCESSIONS

Accessions in 1951 covered the usual fields of rare books, current texts and monographs, current periodicals and a few unusual items, acquired either by purchase or by gift. About sixty books were reviewed for the *New England Journal of Medicine*, and several hundred received shorter notices, largely by Mr. Ballard. As in the past the books, more than 500 in all, were accessioned and made available to our readers, the Library thus being provided with many books that it could ill afford to purchase.

Manuscripts

A Spanish translation of Avicenna on fevers, written about 1453, was added to the William Norton Bullard collection. Also acquired was a French edition of *Collectanea Medica*, written about 1450, containing a large portion of the *Macer Floridus*.

Incunabula

Eleven books were acquired. These have been added to the second volume of the *Catalogue* undergoing compilation by Mr. Ballard. Among the accessions was a medical almanac for 1485, complete and in good condition. Only one other copy, somewhat defective, is recorded in any library, either here or abroad. A broadside almanac for 1498 by Hans Virdung was also added to the Bullard collection, as well as works by Faber de Budweis (Klebs *Catalogue* 388.1), Ganivetus (Klebs 436.1), Hugo Senensis (Klebs 999.1), Lambertus de Monte (Klebs 582.6), Leonicenus (Klebs 600.1), Petrus de Tussignano (Klebs 778.1) and Scanarolus (Klebs 887.1).

The two almanacs add to our extensive holdings of these rare and ephemeral publications, so much used in the fifteenth century. The book by Ugo da Siena is a commentary on Avicenna; Lambertus, on Aristotle Leonicenus, writing on vipers, thought that a snake, common in Italy in his time, was the same as the one employed by the ancients in compounding theriac. Scanarolus, a pupil of Leonicenus, upholds his teacher in the controversy over syphilis in 1498, Leonicenus' *De Morbo Gallico* having been published the year before.

Sixteenth-Century Books

About 100 were added to a growing collection of books published between 1501 and 1600, including Avicenna's *Opera Medica*, in 2 volumes (Venice,

*Presented at the annual meeting of the Boston Medical Library, May 19, 1952.

1595), Bernard de Gordon's *Lilium Medicinae* (Lyons, 1550), Cardanus' *Commentarii* (Basle, 1570) and *De Causis* (Basel, 1583), Champier's *Evangelistarum Symphonia* (Venice, 1519) and the *Speculum Galeni* (Paris, after 1512), Ficinus' *Opuscula* (Venice, 1503), Fuchs' *De Historia Stirpium* (Paris, 1546), Mercurialis' *Artis Gymnasticae* (Venice, 1569), Paré's *La Méthode Curative des Playes* (Paris, 1561) and Theophrastus' *De Historia Plantarum* (Lyons, 1552).

An unusual item was a *Viehartznei* (Frankfurt, 1531). This veterinary manual, consisting of 30 numbered leaves, written in simple, uninvolved German and printed in clear, black type, was designed for the farmer, giving instruction on the rearing of animals such as cows, sheep, pigs, hens and pigeons. There is a section on bee culture. All

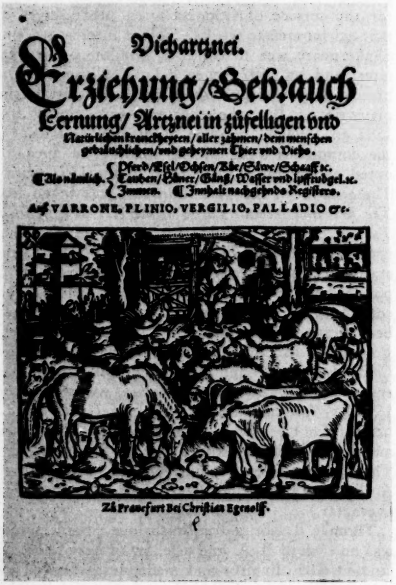
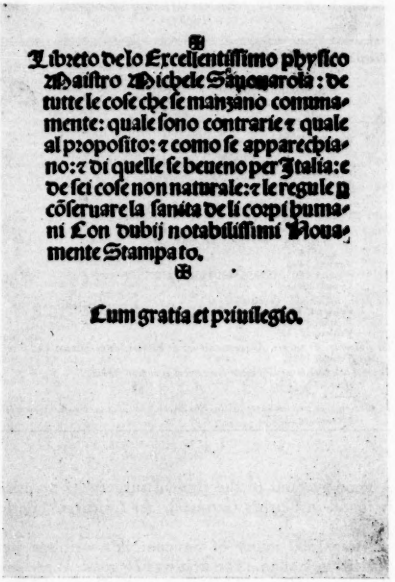


FIGURE 1. *Title Page of the* Viehartznei (*Frankfurt, 1531*).

these animals, with the farmer and his assistants, are shown on the interesting title page (Fig. 1). Diseases are described, and their treatment indicated, with recipes and practical suggestions. The compiler of this informative book is not known, but his sources are easily recognized. Varro, one of the most scholarly and prolific of the Roman writers, and Palladius, another Roman writer on medicine and agriculture, who wrote a farmer's calendar, were both represented in the *Scriptores Rei Rusticae*, a popular incunabulum printed in five editions between 1472 and 1499. The Latin texts were thus well known, but an edition in German, which the farmer needed, is not thought to have been available until this printing in 1531. Not unnaturally, the book contains items from the


Libreto de lo Excellentissimo physico
Maistro Michele Sauonarola: de
tutte le cose che se manzano comuna-
mente: quale sono contrarie & quale
al proposito: & como se apparechia-
no: & di quelle se beueno per Italia: &
de sei cose non naturale: & le regule p
cõseruare la sanita de li corpi huma-
ni Con dubij notabilissimi Nouа-
mente Stampato.

Cum gratia et priuilegio.

FIGURE 2. *Title Page of Savonarola's* De tutte le cose che se manzano comunamente (*Venice, 1515*).

Georgics of Virgil, a scientific poem on husbandry frequently printed after 1469, as well as notes from Pliny's *Naturalis Historia*, also first issued in 1469 and a relatively common book in 1531.

Of popular interest on the conservation of health by the use of a diet of common foods was *De tutte le cose che se manzano comunamente* (Venice, 1515). Written by Giovanni Michael Savonarola (Fig. 2) and published many years after his death, this little book is another example of the trend toward vernacular printing for the public of works previously well known to scholars in their Latin editions. As can be seen by a list (Table 1) of the texts of this popular author in Latin, his various books were frequently reissued, the first being pub-

lished in 1479, twelve years after his death. His greatest work, the *Practica de aegritudinibus a capite ad pedes* (Colle, 1479), was the product of years of service in the army. It is written in a true clinical spirit, with case histories. As a contribution in the first half of the fifteenth century, its reaction against hidebound scholasticism was refreshing and marked Savonarola as a leading figure in his time.

TABLE 1. *Books by Johannes Michael Savonarola (c. 1384-c. 1467).*

Practica de aegritudinibus a capite ad pedes:
Colle, 1479.
Venice, 1486.
Venice, 1497.
Venice, 1502, 1518, 1519, 1547, 1559, 1560, 1561.
De aqua ardenti:
Pisa, 1484.
Magenau, 1532.
Basel, 1597.
De balneis et thermis naturalibus omnibus Italie:
Ferrara, 1485.
Bologna, 1493.
Venice, 1496.
Venice, 1553.
Venice, 1592.
Practica canonica de febribus:
Bologna, 1487.
Venice, 1496.
Venice, 1498.
Venice, 1503, 1517, 1543, 1552, 1561, 1562.
Lyons, 1560.
De pulsibus, urinis et egestionibus:
Bologna, 1487.
Venice, 1497.
Venice, 1552.
De pulsibus; de urinis: de egestionibus; de balneis; de vermibus:
Venice, 1498.
De arte confiendi aquam vitae simplicem et compositam:
Hagenau, 1532.
Basel, 1597.
In medicum practicum introductio, sive de compositione medicamentorum liber:
Strassburg, 1533.

A good account of the type of surgery he practiced is found in Gurlt's *Geschichte der Chirurgie* (Berlin, 1898).

After 1500 many of Savonarola's writings were printed in Italian. The first was *De gotta, la preservatione e cura* (Pavia, 1505), not in the Boston Medical Library, but in the Houghton Library at Harvard. Like all early books on gout, the volume is rarely found. Next in order is the book on diet, noted above, the first edition having been published in Venice in 1508. Finally came the *Trattato utilissimo de molte regole* (Venice, 1554), and *Libro della natura e virtu della cose che nutriscono* (Venice, 1576).

To our collection on the "pest," 14 tracts were added, issued at various dates during the sixteenth and seventeenth centuries. Many were written in German or Italian.

English Imprints

To the collection of English medical books published before 1640, only 5 were added, 3 of them in facsimile by the Shakespeare Association. The other two were *The poore man's jewel, that is to say, A treatise of the pestilence* (London: George Byshop, 1579), by Thomas Brasbrige, and *Opiologia or, A Treatise concerning the Nature, properties, true preparation and safe use and Administration of Opium* (London: Nicholas Okes, 1618), by Angelo Sala, translated by Thomas Bretnor.

The book by Brasbrige is of considerable rarity, the only other recorded copy being in the Library of the British Museum. The Boston Medical Library also has a later edition (1592). Dedicating his book to Sir Thomas Ramsey, Lord Mayor of London, the author, understanding that the herb, *Carduus Benedictus*, was beneficial in the prevention and treatment of the pestilence, set forth his ideas "more perfectly then ever they were before in anie one book, & that in a few leaves of paper, not heavie to be carried, nor long to bee read, nor deare to bee bought." He considered one of the causes of plague to be the sinful practice of "there daily customes of running to playes, and enterludes, and to beare-baitinges, as well uppon the Sabboth day, ordeined for the service of God, as upon other dayes appointed for men to work." This is interesting, since Shakespeare was to come to London a few years later, and by 1592, when a later edition of Brasbrige's book was published, he was an established playwright. But the theaters were closed from 1592 to 1594 on account of plague, and some of the companies went on the road. The quotation noted above stands unchanged in the 1592 edition. The account of the herb, *Carduus*, was taken from *The first and seconde partes of the Herbal of William Turner* (Collen, Arnold, Birckman, 1568), where it is illustrated in *The thirde parte*, p. 18. Turner states, "It preserveth from the pestilence if the pouder be taken in water xxiiii houres before a man come into the infected place." It was said to have been brought from India to Italy for the Emperor Frederick. In England it was commonly known as *Cardo benedictus*, and it is mentioned in Shakespeare's *Much Ado About Nothing*, written about 1598-9. Another drug advised, if *Cardo benedictus* could not be obtained, was angelica, also figured and described by William Turner in *The thirde parte*. These drugs were "prooved by the practise of the Author." (The drugs have since lost their high character.)

Thomas Brasbrige (or Brasbridge), born in 1547, was an Oxford B. A. and a fellow of Magdalen. He studied both divinity and medicine at Oxford and remained to attend the plague-stricken city during the severe epidemic of 1563-64, although only a student of seventeen. In 1578 he resigned his fellowship at Oxford and went to London to tutor and practice. There he wrote his small book on the plague. He later lived, opened a school and practiced medicine in Banbury. The date of his death is not known.

The second book, Sala's *Opiologia*, is even more of a rarity, partly on account of its famous translator. Angelo Sala, born in Vicenza, was educated in Switzerland and The Hague, practicing in that

city, Hamburg and elsewhere. He wrote many books on medical chemistry. From The Hague he published in French in 1614 his *Opiologia*. It is this book that Thomas Bretnor translated and enlarged in 1618 and published in London. Bretnor was an almanac maker, a "student of physicke" who issued prognostication calendars, from 1605 to 1630, containing some medical observations. A somewhat notorious character in London, Bretnor is noticed by Ben Jonson and by Thomas Middleton. He defends the use of laudanum in medicine, dedicates the book to two physicians and mentions the druggists who were competent to prepare the drug.

Certain English imprints published before 1640 have been printed in facsimile. Three of these were acquired in 1951, fully as useful for scholars as the originals. We are indebted to The Shakespeare Association for their reproduction of the following works: *A Health to the Gentlemanly Profession of Serving-Men* (London, 1598), by J. M.; *Present Remedies Against the Plague* (London, 1603); *Orders, Thought Meete by Her Maiestie . . . to be Executed Throughout the Counties . . . Infected with the Plague.* (London, 1592); and *A Discourse of the Preservation of the Sight: of Melancholike Diseases; of Rheumes, and of Old Age* (London, 1599), by Andreas Laurentius (André DuLaurens), translated from French by Richard Surphlet. The facsimile edition of the last has an introduction by Sanford V. Larkey, of Baltimore. Laurentius received his doctoral degree from Montpellier in 1583, became professor of medicine in 1586 and served the court of Henry IV. His most important works, other than the *Preservation of the Sight*, were anatomic. Although he knew of the works of Vesalius and of Fallopius, his own views of physiology were strictly Galenical.

Of books published in England after 1640, note should be made of the College of Physicians' *Cure of the Plague* (London, 1665); Nathaniel Johnston's *The King's Visitorial Power Asserted* (London, 1688); and James Kirkpatrick's *The Analysis of Inoculation . . . in the Small Pox* (London, 1754) and a second edition (London, 1761).

James Kirkpatrick (Killpatrick), of Charleston, South Carolina, presents many biographic and bibliographic problems, for he wrote under two names and is often confused with another James Killpatrick, who died in 1743. The most informative notes published to date are by Dr. J. I. Waring, of Charleston, in the *Annals of Medical History* for 1938, but Kirkpatrick's bibliography is far from complete or even authenticated in all its details. With the help of Dr. Waring and Mr. W. J. Bishop, librarian of the Wellcome Historical Medical Library in London, a preliminary list, open to correction, of Kirkpatrick's works has been assembled (Table 2).

TABLE 2. *Books Believed to Have Been Written or Edited by James Kirkpatrick (Killpatrick).*

An Essay on Inoculation. Charleston: *S. Carolina Gaz.* June 8-15, 1738. (Charleston Library Society.)
The case of Miss Mary Roche. (No copy known.)
An Epistle to Alex. Pope, Esq. from South Carolina. London, 1737. (British Museum and New York Public Library.)
Another poem to Pope. (Not found.)
A Full and Clear Reply to Doctor T. Dale. Charlestown, 1739. [Facsimile]
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Celeberrimi Popii tentamen de modis criticis . . . London, 1745. (British Museum.)
A Popii excerpta quardam . . . London, 1749. (British Museum.)
A letter to the real and genuine Pierce Dod by Dod Pierce. London, 1746. 2 ed. London, 1746. (J. I. Waring.)
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Some reflections on the causes and circumstances that may retard or prevent the putrefaction of dead bodies. London, 1751. (Boston.)
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2 ed. London, 1761. (Wellcome; Boston.)
3 ed. London, 1761.
Idem. (In German). Leipzig, 1756. (Wellcome.)
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Advise to the people in general, by S. A. D. Tissot.
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2 ed. London, 1766. (Wellcome; Boston.)
3 ed. London, 1767. (Boston.)
3 ed. rev. London, 1768 (Wellcome.)
4 ed. rev. London, 1771. (Wellcome; Boston.)
6 ed. London, 1793.
4 ed. rev. Philadelphia, 1771. (Wellcome; Boston.)
Edinburgh, 1766.
Bristol, 1769.
Edinburgh, 1778. (J. I. Waring.)
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Preface and notes J. K. London, 1769. (Wellcome; Boston.)
2 ed. rev. London, 1769. (Wellcome.)
An essay on the disorders of people of fashion; and a treatise on the diseases incident to literary persons, by S. A. D. Tissot. Preface and notes by J. K. London, 1772. (Wellcome.)
Advices, with respect to health, by S. A. D. Tissot. Bristol, 1769. (Wellcome.)
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Miscellaneous

Among the additions to the collection of travel books by physicians mention should be made of two folio volumes, weighing 21½ pounds, published in London for the author in 1707 and 1725. This famous book, *A Voyage to the Islands Madera, Barbados, Nieves, S. Christophers and Jamaica,* by Hans Sloane, resulted from a trip taken in 1687–89. Sloane accompanied the Duke of Albemarle, who was governor of Jamaica, as a physician, having received his medical degree from the University of Orange in 1683 at the age of twenty-three. He had previously studied medicine at Paris and Montpellier; he became a fellow of the Royal Society in 1685 and of the College of Physicians in 1687. He remained with Albemarle fifteen months and returned to London in May, 1689, with 800 plants. Beginning an active practice of medicine and assuming the arduous duty of secretary of the Royal Society in 1693, at which time he revived the *Transactions*, Sloane was not able to publish his *Voyage* until eighteen years had elapsed, although he issued in the meantime a catalogue of plants in Jamaica, in Latin, in 1696. The Library copy is sumptuously bound, with each page and plate attached to a reinforced back, so that the plates and maps may be opened flat. The 274 plates, "as big

as the Life," are of animals, coral, plants and other natural-history objects. Part of the Introduction to the first volume contains notes on the diseases Sloane encountered in Jamaica and the methods used to treat them, an enlightened account of practice at the end of the seventeenth century.

Also added were five volumes of Conan Doyle's Sherlock Holmes stories, published in Reykjavik,

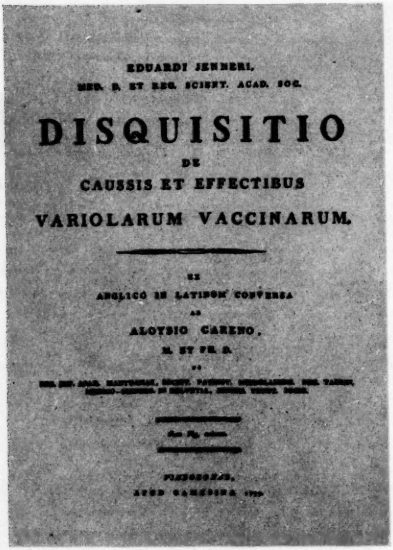
EDUARDI JENNERI,
MED. D. ET REG. SCIENT. ACAD. SOC.
DISQUISITIO
DE
CAUSSIS ET EFFECTIBUS
VARIOLARUM VACCINARUM.

FIGURE 3. *Title Page of Jenner's* Inquiry, *in Latin (Vienna, 1799).*

1905–1949, in Icelandic; *Naparsimasonut ikiortiksat* (Greenland, 1856); René Descartes' *Oeuvres* (Paris, 1897–1910); Thomas R. Chivers' *Nacooche* (New York, 1837); George W. Snow's *Records of Autopsies while Medical Examiner* (Newburyport, 1858, 1877, 1885); and *Società Enuliano Romagnola di Chirurgia* (Bologna, 1935–1947).

The Library acquired a Latin translation of Edward Jenner's "Cow-pox Inquiry" (Fig. 3) published in Vienna in 1799 (LeFanu 33), a year after the original was issued in London. It contains both the *Inquiry* and *Further Observations* (1799). The plates were newly lithographed in color. An edition in German was published in the same year, showing the immediate interest abroad in this epoch-making book. It appeared in French and in Italian in 1800 and in Dutch in 1801. The book was also published in English in Springfield, Illinois, for Dr. Samuel Cooley in 1802, and in Portuguese in 1803.

Special Gifts

The Clinico-pathological Case Records, Massachusetts General Hospital. Complete, bound set, 1915–1949, was received from Dennistoun M. Bell; books and periodicals were given by Harold Bowditch, Clarence S. Brigham, Nishon M. Hampson, Henry F. Howe, Timothy Leary, Sidney Licht, William J. Mixter, Channing C. Simmons, Warren R. Sisson, Fritz B. Talbot, J. I. Waring, Jacob Zeitlin and others and by many hospitals, medical libraries and journals.

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Viets, H. R. Boston Medical Library: Washington Ayer, M.D., and first public demonstration of ether anesthesia. *New Eng. J. Med.* **244**: 344, 1951.

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Idem. Boston Medical Library: Medical education, 1854-57. *New Eng. J. Med.* **244**:380, 1951.

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Idem. Boston Medical Library: Osler and his text-book. *New Eng. J. Med.* **244**:457, 1951.

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Editorial. Disposition of rare book collections. *New Eng. J. Med.* **245**: 870, 1951.

Editorial. Beruti on puerperal fever. *New Eng. J. Med.* **245**:951, 1951.

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Colby, C. C. Medical libraries and collections in Western Germany, with particular reference to American occupation zone. [Report submitted to U. S. Department of State, on October 13, 1951.] [Washington, 1951.] German libraries, five years after. *Massachusetts Library A. Bull.* **41**:45-57, 1951.

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MEDICAL PROGRESS

BACKGROUND TO BRITAIN'S HEALTH SERVICE

HUGH CLEGG, M.D., F.R.C.P.*

LONDON, ENGLAND

HUNDREDS of thousands of words have been written about Britain's National Health Service (N. H. S.). Much that has been written has been mere propaganda. Ridiculous claims for the N. H. S. have been made in my own country by Socialist spokesmen. They have said, for example, that the fall in the infant mortality rate is due to the Labor Government's health service. This is, of course, nonsense. The infant mortality rate has been falling steadily for a large number of years — under the old system and under Liberal and Conservative governments. British medicine did not begin with the appointment of Mr. Aneurin Bevan as minister of health in 1945. Its history goes back a little further than that.

On the other side of the picture some propagandists have done their best to discredit the National Health Service. They have seized upon its defects — and it has plenty — and have magnified them out of all proportion. Doctors on both sides of the Atlantic have allowed their emotional reactions to get the better of them. It is as well to recognize this frankly. Such an attitude is unscientific. The human cerebral cortex is a relatively late evolutionary development, but physicians should not let the thalamus run away with it. Destructive criticism is terribly easy — and tempting.

To continue this preamble, one should, perhaps, provide another glimpse of the obvious by saying that what suits one country will almost certainly not suit another. Not even two peas in a pod are exactly alike. Nevertheless, certain principles are fundamental to the practice of medicine in civilized countries. Everyone is conscious of the continuity of medical history. In drawing up a code of ethics the World Medical Association went straight back to the Hippocratic Oath for its inspiration. The very fact that the World Medical Association exists is an outward recognition that the doctors of the world have common ideals and a common purpose. So far as any system of medical service runs counter to the ideals and principles of medicine, to that extent it stands condemned — and to that extent doctors should condemn it. Here again the World Medical Association has usefully stepped in and drawn up principles that, in its view, should govern the provision of medical services under schemes of social security. It has recently framed these in informed comment and explanation in a document that deserves close study.†

*Editor, *British Medical Journal.*

†Organization Section. World Medical Association. *J. A. M. A.* **149**: 488, 1952.

HISTORICAL BACKGROUND

One of the most attractive fallacies of human society is the fallacy of the Golden Age. Everything in the Garden of Eden was lovely until the serpent reared its ugly head. Everything in British medicine was beautiful until Mr. Aneurin Bevan lifted up his loud and excitable voice. Man was once a noble savage. Now he is a neurotic hanger-on of the conveyer belt. All these myths have a charm of their own, and indeed have a bit of the truth in them. But the Golden Age never was. It may yet be. The savage never was noble. His life was cribbed, cabined and confined by totem and taboo. And modern man still has his totem poles and elaborate taboo systems.

In judging any situation one must, I hold, try hard to divest one's mind of taboos. When one passes the phase of "trailing clouds of glory," one runs the risk of spending the remaining phase of life in trailing dust storms of prejudice and outworn slogans.

This may, to the American ear, strike an apologetic note. Perhaps it is partly that. But, more, it is a plea that the British system of medical services should be studied objectively as something that is happening in the present British scene. Parts of it are good, parts indifferent, and parts bad.

It is essential to put the matter in perspective, to look far enough back before one looks at what is and what may yet be. This essay is an attempt to do this. An American doctor friend of mine said to me a few weeks ago: "I want to know the schedule of fees for operations in your Health Service. For example, what can a surgeon charge for an appendectomy in a private ward in a state hospital?" The answer is fifty guineas in 85 per cent of the private beds, and anything one likes in the remaining 15 per cent. I know such facts are interesting and important. But they have to be put into their setting. Another American friend said, "I think it is downright crazy to give people something for nothing." This was a downright statement and hit a nail firmly on the head. And, talking of heads, I remarked that it was quite true that if my friend, Morris Fishbein, wanted a wig he could come to Britain and get one free of charge, the only snag being that the British Government would not pay the cost of his transportation — and he would have to have a medical certificate.

But let me retreat from the present for a few paragraphs.

Back to 1832

What is happening today is the continuation of something that happened in 1832. It was then that the Reform Bill was passed, at a time when the Labor Party was not even a gleam in a father's eye. In 1832 the country was in the throes of the first of four epidemics of Asiastic cholera that plagued Britain in the nineteenth century. These epidemics frightened people, as well they might. They showed dramatically and painfully that health and disease were to a large extent communal problems. As the great historian of epidemics in Britain, Creighton, put it: "The *facies Hippocratica* had not been seen on so extensive a scale in England since the sweating sickness of three hundred years before." Central and local "boards of health" were set up to guide those trying to brave the epidemic storm.

Two years after the first cholera epidemic, in 1834, the Poor Law Amendment Act was passed — the result largely of the efforts of Edwin Chadwick, the pupil and friend of the utilitarian philosopher Jeremy Bentham. Chadwick's report on "The Sanitary Condition of the Labouring Population of Great Britain" forcibly brought into the open the close connexion between poverty and ill-health and between ill-health and insanitary conditions. In 1848 the first public-health act was passed, and the first medical officer of health was appointed — in the great port of Liverpool: a more practical move to the relief of poverty and suffering than Karl Marx's communist manifesto published in the same year. In 1853–54 Dr. John Snow showed that cholera was spread by the drinking of infected water.

The link demonstrated between poverty, bad sanitation and disease led the public-health movement in the nineteenth century to concentrate on sanitation and the relief of the poor.

In industrial England of over a hundred years ago the conditions of employment of women and children in mine and factory shocked humanitarians. Factory acts were passed to protect them from the abuses that existed, though it was not till 1898 that a medical inspector of factories was appointed.

Cholera frightened England into looking at itself more closely. Fear stirred the social conscience, and politicians expressed this, partly, by legislative enactment.

There is one other fact that may be isolated from the many. In 1836 the Registration Act was passed, and vital statistics gave legislators and administrators facts about the causes of death and the ages at which people died. Dr. William Farr, the Registrar General of a hundred years ago, saw these facts as "the complement of the primary question of teaching men how to live a longer, healthier, and happier life." In these words he foresaw the possibility of passing from a negative to a positive conception of health.

National Health Insurance (1911)

It was against this nineteenth-century background that the Liberal Government, under the impulsion of Lloyd George, introduced compulsory health insurance in 1911. The idea had been foreshadowed in the French revolution, and Lloyd George picked up some ideas from Bismarck's scheme for Germany. But I think it is true to say that the National Health Insurance Act of 1911 was a continuation of the reforms begun in the third decade of the nineteenth century. In saying this, I am not saying whether the Act of 1911 was good or bad, but simply that it was part of a movement begun long before that date. Nevertheless, it cannot be pretended that conditions for large numbers of people and large numbers of doctors were satisfactory before 1911. They were not. There was no Golden Age before then. Lloyd George did not bewitch and bewilder with his Welsh tongue the harmonious inhabitants of a medical Garden of Eden. If I may, somewhat rashly, interject a political note I should say that in introducing "compulsion" he departed from something fundamental to the Liberal philosophy.

Up to 1911 the state had restricted itself to the public-health field. It took a big leap — forward or backward — in 1911, when by legislation it provided a personal health (or disease) service for all manual workers and for the black-coated workers earning less than a specified figure each year. The service was limited to that which a general practitioner could give. Hospitals, consultants and specialists were not included in it. It was not available for the wives or children of the insured worker. By 1946, when the National Health Service Act became law, nearly 25,000,000 Britons were being looked after by general practitioners under the Lloyd George scheme.

In 1911 the medical profession, through the British Medical Association, bitterly opposed the National Health Insurance (N. H. I.) Act. After it had gained important concessions it withdrew its opposition. In time it came to approve of the N. H. I. scheme, and between the two world wars the B. M. A. urged that it should be extended to provide a complete medical service not only to the insured worker but also to his wife and children. If this "two-way extension," as it was called, had come about, approximately 85 to 90 per cent of the population of Britain would have had a comprehensive medical service.

This is an important fact. It means that by the outbreak of World War II the British Medical Association, with few if any dissentient voices, was advocating a state-provided comprehensive medical service for all but about 10 per cent of the population — and provided through compulsory health insurance.

I should again like to say that I am not trying to advocate compulsory health insurance, or to say whether it is good or bad. Undoubtedly, it had its good points *and* its bad points. General practitioners working in the scheme accepted it. By and large their economic position was much more secure than it was before 1911. The British people thought it was a good thing. Royal Commissions thought the same. Between 1911 and 1946 the health of Britons got better and not worse. And their moral fiber was stout enough to stand up to German bombs and threats in 1940 and 1941. Medical research went ahead, and out of Lloyd George's Act came the Medical Research Council. During the period 1911–1946, men like Sir Gowland Hopkins, Sir Henry Dale, Sir Edward Mellanby, Sir Alexander Fleming, Sir Howard Florey, Sir Charles Sherrington and Dr. E. D. Adrian — to mention a few outstanding names — made fundamental contributions to medical science. Their minds were not paralyzed by the thought of compulsory health insurance.

The Medical Planning Commission

From 1832 to the outbreak of war in 1939, then, the state played a gradually increasing part in caring for the health of Britons. In 1940 the British Medical Association set up a Medical Planning Commission, in co-operation with other important medical bodies such as the Royal Colleges of Physicians and of Surgeons. The seventy-three members of this Commission defined the objects of a medical service thus:

> (a) to provide a system of medical service directed towards the achievement of positive health, of the prevention of disease, and the relief of sickness;
> (b) to render available to every individual all necessary medical services, both general and specialist, and both domiciliary and institutional.

The B. M. A. published an interim report of this Commission in 1942. The report advocated group or co-operative general practice in and from a health center — a scheme suggested as long ago as 1920 by Lord Dawson. The report advocated a regional hospital service in which existing inequalities between the voluntary and the municipal hospitals should be abolished. Both these ideas were taken over by Mr. Aneurin Bevan in the National Health Service Acts of 1946 and 1947 — the one for England and Wales and the other for Scotland.

Beveridge's Social Security Plan

Then hard upon the heels of the Medical Planning Commission's report came the Beveridge Report on "Social Insurance and Allied Services." This report was drawn up at the request of the Coalition Government under the prime minister, Mr. Winston Churchill. It provided a "Plan for Social Security." In a statement of principles these words occur:

> Now, when the war is abolishing landmarks of every kind, is the opportunity for using experience in a clear field. A *revolutionary moment in the world's history is a time for revolution, not for patching* [italics mine].

Beveridge set out to defeat the "five giants on the road of reconstruction," and he named them Want, Disease, Ignorance, Squalor and Idleness.

Beveridge's "revolution" was based on three assumptions, of which the second was "Comprehensive health and rehabilitation services for prevention and cure of disease and restoration of capacity for work, available to all members of the community."

And he said in his report that this assumption was in accord with the B. M. A.'s interim report of the Medical Planning Commission. His report stated that "Social insurance is much cheaper to administer than voluntary insurance," and that "the insurance scheme is one for all citizens irrespective of their means." Again, in the section on health proposals, Beveridge stresses the fact that his report "proposes a compulsory social insurance scheme without income limits." And he pointed out one possible outcome of this: "The possible scope of private general practice will be so restricted that it may not appear worth while to preserve it."

At the risk of being tedious I shall give one more quotation from Beveridge's Report: "From the standpoint of social security, a health service providing full preventive and curative treatment of every kind to every citizen without exceptions, without remuneration limit and without an economic barrier at any point to delay recourse to it, is the ideal plan."

As the wits put it, the Beveridge Report provided full security from the womb to the tomb, from the cradle to the grave.

Mr. Churchill's government accepted the Report and instructed the Departments of State to prepare schemes for putting its proposals into effect.

The British Medical Association also accepted the Report. It did not proceed with the work of its own Medical Planning Commission, and its report has to this day remained in its interim state. Instead of drawing up a final version, the B. M. A. urged its members to co-operate with the Government in providing the kind of medical service outlined in the Beveridge Report, on two conditions. The first was that the Beveridge Report should be acted on as a whole, and not just its medical section. The second was that the character, terms and conditions of the proposed medical service should be worked out in negotiation with the medical profession.

Before the publication of the Beveridge Report, the B. M. A.'s policy was that a comprehensive medical service should be made available to 90 per cent of the population. This left out of it the 10 per cent thought to be able to pay direct for personal medical care. After the Beveridge Report the B. M. A. gave up this position, and agreed that a health service should be available to the whole community, provided that private practice should be allowed to continue.

Lloyd George's scheme of 1911 had prepared the way for an all-embracing compulsory insurance against Beveridge's five giants, among them the giant Disease. The B.M.A.'s general acceptance of the Beveridge plan was in tune with the prevailing mood in the England of 1940–42. The war was literally "abolishing landmarks of every kind." Few of us then took much note of Beveridge's other words: "A revolutionary moment in the world's history is a time for revolution, not for patching." Britain felt desperately in need of security against the armed might of Germany. It may not be fanciful to see in the Beveridge plan a displacement of this emotional reaction on to its internal social hazards.

Mr. Willinck's Plan

At the beginning of 1944 Mr. Churchill's Coalition Government published a White Paper on a National Health Service, the ultimate responsibility for this to lie with the Minister of Health in Parliament, who was the conservative Mr. H. U. Willinck. The White Paper proposed first that the service should be available to the whole community as a right; secondly, that it should be comprehensive, and include consultant, specialist and hospital services as well as those of the general practitioner; thirdly, that it should be free of charge to the user, the cost to be borne by the whole community through rates, taxes and a special social-security contribution; and, finally, that the development of health centers, and therefore group general practices, should be encouraged.

Beveridge's revolution, blessed by Mr. Churchill's Government, was coming a step nearer. The B. M. A. was critical of many of the White Paper's Proposals, and in particular of the part that advocated the abolition of the custom of buying and selling general practices. It is important to note that a Conservative Minister of Health (Mr. Willinck) under Mr. Churchill was attacking this cherished custom of the general practitioner. The B. M. A. was beginning to persuade him to change his mind when the General Election of 1945 brought the Labor Government into power and Mr. Aneurin Bevan into the position of minister of health.

It is important to note that the ground had been well prepared before Mr. Bevan came on the scene. The National Health Service, for good or for ill, had been conceived in other minds. It was not the invention of the Labor Government in general or of Mr. Bevan in particular. I have analyzed the situation in some detail to show this, and to show the way in which men's minds were prepared over a great many years to accept a position that, when it came about, surprised and even shocked the medical profession in other countries. I think it was the Fabians that called this process the inevitability of gradualness.

Mr. Bevan's Plan

Mr. Bevan, in 1945, had not much thinking to do. Most of it had been done for him. His principal contribution was the proposal (now carried out) to bring into state ownership all municipal and (with some exceptions) voluntary hospitals. The finances of the voluntary hospitals were in a sad state, and their owners put up little resistance to Mr. Bevan's proposal. He firmly adhered to the Conservative Mr. Willinck's original idea of abolishing the custom of buying and selling general practices in a publicly provided Health Service, and with the B. M. A. agreed on the sum of £66,000,000 to compensate general practitioners for loss of money if this custom was abolished, as it was. There is, of course, no restriction on the buying and selling of private practices outside the Health Service.

The N. H. S. Act for England and Wales came on to the Statute Books in 1946, and that for Scotland in 1947. On July 5, 1948, the Acts came into operation. Between these dates many things happened, and for the outside observer the picture must still look confused. But it sorts itself out only if looked at against the background I have tried to sketch in.

In drawing up the draft Interim Report of the Medical Planning Commission of 1942 many important medical organizations co-operated with the B. M. A. The interests of the consultants and specialists were represented by the Royal Colleges in England and in Scotland.

In the critical phase of opposition to Mr. Bevan's N.H.S. Act there was not the same unity. In England, at all events, the Royal Colleges seemed to regard the fight as one that chiefly concerned the general practitioners. And the emphasis laid by the B. M. A. on retaining the right to buy and sell public practices lent color to this view. Both general practitioners and consultants, however, were at one in resisting the idea of a whole-time salaried state medical service, — and they still are. This idea was — and probably still is — the policy of the Labor Party. It would be unwise to deny that the existence of the present N. H. S. will make it easier than it was to introduce such a service if a future war opens the gates to another Beveridge revolution.

The B. M. A.'s plebiscite of January, 1948, showed that British doctors were overwhelmingly opposed to Mr. Bevan's Act. But the reasons for this opposition among the various groups were not ascertained. I think the opposition was based on two facts: the first was an intense dislike of Mr. Bevan, who had gone out of his way to antagonize the medical profession; and the second was a real fear and dislike of a state medical service in which the doctor would eventually function as a salaried "civil servant." Four months after this plebiscite Mr. Bevan, in April, 1948, stated in the House of Commons that an act would be passed to safeguard the

profession from the imposition of a salaried service under the N. H. S. Acts of 1946 and 1947. The initiative had passed to him, and in this fashion he removed — at least on paper — the profession's main ideologic objection.

It should be recalled that the B.M.A. throughout this period reiterated its "whole-hearted desire for a comprehensive medical service," and stated that its opposition was to parts of the Act and not to the Act as a whole. After all, the B. M. A. had accepted by 1939 the idea of a service for 85 to 90 per cent of the population on the basis of compulsory insurance. It produced its Planning Commission's Interim Report in 1942. In the same year it approved of the Beveridge report, and subsequently agreed that a medical service should be available to the whole community provided room should be left for private practice. Its expression of a "whole-hearted desire for a comprehensive health service" in 1948 was therefore consistent and logical.

A plebiscite held after Mr. Bevan's statement in Parliament in April, 1948, showed that more doctors were now willing to accept the N. H. S. Acts, though there was still a majority against them, but not sufficient to guarantee victory if the fight was continued.

My own opinion, for what it is worth, is that these things are determined principally by the climate of opinion and the state of a country's economy. The climate of opinion was set by the Beveridge social-security report, which was accepted, and welcomed, by press, Parliament and people, and by all political parties represented in the House of Commons. The course had been set for the Welfare State. Britain emerged from the war battered and almost bankrupt. The taxation necessary to pay for the war *and* for social security made people even in the upper income-brackets jump at the chance of getting their drugs, dentures and wigs free of charge — not to mention their major operations. They were caught up by the inevitability of gradualness.

Since 1948

Four years have passed since July 5, 1948. The National Health Service has come to stay. There can be no doubt of that. The mass of the people like it. All political parties support it. Begun in Mr. Churchill's Government, it received its finishing touches in Mr. Atlee's Government.

How is it working out? Well, at least it is working. And it has turned out to be vastly more expensive than anyone calculated. Yet, at a cost of between £8 and £10 a year for every Briton, the price does not seem to be too high to pay for a complete medical service to every man, woman or child in the country.

General practitioners were underpaid for the first four years, but the recent award of the ajudicator, Mr. Justice Danckwerts, of some £40,000,000 to general practitioners has gone a long way to put this right. Some groups of consultants and specialists have suffered economically; by and large they do not moan about their fate.

But there is a great deal yet to be done before the National Health Service gives real satisfaction to both public and profession. There has been a big outcrop of administrators, particularly in the hospital service. Those who minister to the sick are often hampered by those who administer. The fact that a Conservative Government has proposed and the profession has accepted a further restriction of the numbers a general practitioner may have on his list does to this extent challenge the B. M. A.'s fundamental principle of free choice of doctor. This is linked up with the payment by capitation fee. Any further restrictions would tend to bring a salaried service a stage nearer.

Yet in spite of all the difficulties the N. H. S. is working more smoothly than many thought it would. The health of the people seems to be better than it was. More students than ever are clamoring to enter the medical schools, and hundreds are being turned away each year from each school. Research is being carried on vigorously, and the output, and standard, of published work is higher than it was before the war: at least that is my impression as a medical editor.

British doctors are in good heart. They are putting a great deal of work and thought into ideas for improving the service. Their task in the future is to enlarge the area of freedom in a state-provided service, and to do this they must curb the ambitions of the politician and the proliferating tendencies of the administration. This is not an easy task. But it is being tackled. The future forms of service will still, I believe, be determined principally by two factors: the development of medical science, and the economic position of Britain. The first of these will expand beyond present dreams; in these days of prolonged and continued austerity it is not easy to be so happy about the second.

MEDICAL INTELLIGENCE

CAUSES OF CUTTING-OIL DERMATITIS*

GEORGE E. MORRIS, M.D.,† AND
CLARENCE MALOOF, M.D.‡

BOSTON

THE Massachusetts Division of Occupational Hygiene, as one of its services, has several valuable bulletins that it supplies on request to physicians, safety engineers, industrial management and others interested in the field of industrial health.§ These bulletins are periodically revised and reprinted, incorporating the latest advances in industrial hygiene.

Dr. Hervey Elkins, director of the Division, requested that we review the bulletin on cutting-oil dermatitis for possible improvement, the bulletin having last been printed in 1943; since then more than a thousand copies have been distributed to Massachusetts industrial plants.

FIGURE 1. *Comedones and Papules from Cutting Oil.*

One of us (G.E.M.), who had taken part in its revision in 1943, was convinced in 1951 that the bulletin had not adequately fulfilled its mission. Cutting-oil dermatitis was almost as prevalent in 1951 as in 1943, and it was therefore deemed advisable to try some original experiments to determine why cutting-oil dermatitis prevailed.

Cutting oils are one of the major causes of industrial dermatitis — accounting for about 15 per cent of all industrial dermatoses.[1] These oils cause comedones and papules (Fig. 1), pustules, erythema, vesicular eruptions, furuncles, carbuncles and granulomatous lesions, and some are even carcinogenic.

Dr. Elkins was asked to obtain some oils that fluoresced on the skin, and 3 such samples were obtained and utilized in this work. These oils, which had the property of giving off visible light when illuminated by invisible ultraviolet light, could be detected by such a light when ordinary light would not show them. The filtered ultraviolet light showed fluorescence of minute quantities of these oils when they were not completely removed from the skin.

The fluorescent oils were rubbed onto the forearm and were washed off with various hand soaps, sand soaps, corn-meal cleansers, sulfonated oils and several common household detergents. Twenty-eight such cleansing agents were used, 9 having been gathered by one of us (C.M.) from various industrial plants. The oils were rubbed onto the skin and then washed off. Examination after washing and drying showed that although the skin appeared to be clean, it actually fluoresced; oil was visible by this fluorescence on the skin after each washing. Not one of the 28 cleansers removed the oils so that all the fluorescence disappeared.

It is obvious from this study that the worker is not removing the oil completely from his skin and a dermatitis is consequently developing from an unsuspected lack of cleanliness, the soap used being probably ineffective for thorough cleansing.

The main cause of cutting-oil dermatitis is therefore the lack of a cleansing agent that will effectively remove all the oil from the worker's skin at the end of the work period.

A second factor of importance in some cases is the wipe rag that is supplied to the worker. These rags are supposed to be clean and free of oil after laundering. The workers in two plants, however, suggested to the management that the rags were actually causing their oil eruptions. The medical department asked for advice, and the supposedly clean wipe rags were washed in a cleanser of known value in removing oil. Figure 2 shows that the clean wipe rags actually contained large amounts of oil when they were returned to the worker from the laundry — the "clean" wipe rags were dirty.

A third factor is the lack of protection of the worker. Old-fashioned, outdated machines that spread oil all over the worker should be replaced with more modern apparatus. Otherwise, protective aprons and sleeves should be supplied.

Protective creams are to be subjected to the same type of study used for the cleansers, and a report on them will be made at a later date.

*Presented at the thirty-first annual meeting of the Massachusetts Safety Council.

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§Obtainable from the Division of Occupational Hygiene, 286 Congress Street, Boston, Massachusetts.

A study of oil folliculitis and oil dermatitis is of interest, not only to the industrialist and to the worker but also to physicians in general. The best theory of the cause of pimples or ordinary adolescent acne is that this condition starts with oil on the skin that hardens in the pores to form blackheads.[2] Blackheads, it should be reiterated, are due to hardened human oil and not to dirt.

It is not hard to picture that if 28 detergents failed to remove a simple mineral oil from the skin they would not remove the oil from an adolescent's face or back. The answer to ordinary acne, then, lies in the scope of this work. If a cleanser that will remove oil without burning the skin can be found, adolescent acne or pimples may be avoided. It is our opinion after years of study that no agent on the market today cleans either mineral oil or natural oil from the skin of the worker or from the skin of adolescents.

Cutting-oil dermatitis may therefore be explained by the fact that the majority of the cleansers supplied to workers for the removal of oils fail to remove them completely. To the unaided eye the skin appears to be clean and free of oil, but the filtered ultraviolet light demonstrates that the oil is still on the skin. Dirty wipe rags, old-fashioned machines that spray oil all over the worker and the lack of protective clothing are also involved in some cases.

This study has also revealed that many other substances that seemed to be cleaned from the skin actually are not so removed. One of us (G. E. M.) has frequently noted that the pores of girls are filled with the colored make-up preparations they use, even though the girls were using strong detergents for cleaning their faces.

Coal tar, apparently removed entirely from the skin, still showed fluorescence under the ultraviolet light. Penicillin ointment that appeared to be completely removed from the skin actually was still present under the filtered ultraviolet light.

Thus, at least four substances — cutting oils, some make-up creams, coal tar and an ointment — appear to have been washed off the skin but actually are still on it. They can cause trouble even when they appear to have been completely removed.

This lack of ability to clean the skin may be a factor in many other occupational dermatoses.

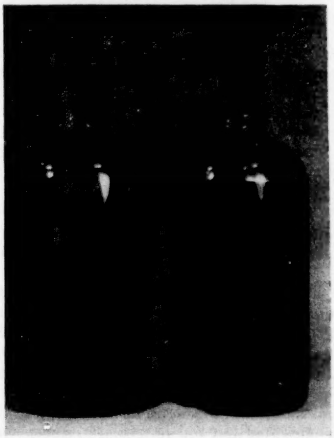

FIGURE 2. *Material Removed from "Clean" Wipe Rags. The right-hand bottle shows oil and grease removed from 6 "clean" wipe rags. The left-hand bottle is the detergent alone.*

Further studies will be undertaken to discover actually how many of the industrial chemicals are removed from the skin.

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CASE RECORDS OF THE MASSACHUSETTS GENERAL HOSPITAL

Weekly Clinicopathological Exercises

FOUNDED BY RICHARD C. CABOT

BENJAMIN CASTLEMAN, M.D., *Editor*

VIRGINIA W. TOWNE, *Assistant Editor*

CASE 38381

PRESENTATION OF CASE

A fifty-two-year-old man entered the hospital because of severe generalized abdominal pain.

Eight hours prior to entry the patient had the sudden onset of excruciating generalized abdominal pain, which soon became localized on the right side of the abdomen. The pain was sharp and unrelenting and radiated into the right flank. He felt somewhat nauseated but did not vomit. An enema six hours before admission failed to give any relief. There had not been any chills, fever, urinary symptoms or pains in the legs.

Since youth he had known of a "heart condition," the exact nature of which he could not state; however, except for some shortness of breath on exertion, he denied all cardiac symptoms, and he had never taken any cardiac drugs. During the six months before admission, he had noted bleeding by rectum, which he attributed to severe hemorrhoids. In the week before entry he had taken "bran" daily because of constipation and had been passing several loose stools daily, some of which were blood streaked. There was no history of drug intake of any kind or of exposure to noxious substances. There allegedly had been some domestic strife in the family between the patient, his wife and his wife's brother.

Physical examination revealed a pale, acutely ill man complaining of severe pain. The lungs were normal. The heart rhythm was grossly irregular; there were no murmurs. There was spasm and tenderness on the right side of the abdomen and some percussion tenderness in the right costovertebral angle. No distention was present, and peristaltic sounds of normal quality were heard. An easily reducible right inguinal hernia was present.

The temperature was 99°F., the pulse 128 and irregular, and the respirations 24. The blood pressure was 130 systolic, 90 diastolic.

The urine had a specific gravity of 1.016, was alkaline and gave a ++++ reaction for albumin; the sediment was loaded with white cells and contained 200 red cells and an occasional hyaline cast per high-power field. Examination of the blood revealed a hemoglobin of 17 gm. and a white-cell count of 18,000, with 87 per cent neutrophils. The nonprotein nitrogen was 48 mg., the calcium 7.8 mg., phosphorus 5.8 mg., and the phosphatase 7.33 units per 100 cc.; the sodium was 139 milliequiv., the potassium 6 milliequiv., the chloride 108 milliequiv., and the carbon dioxide 24.9 milliequiv. per liter.

An electrocardiogram showed impure auricular flutter with an auriculoventricular block that varied from 3:1 to 6:1. The T waves were deeply inverted in Leads 2 and 3, upright in Leads AVL and V_1 through V_4 and inverted in Leads AVF, V_5 and V_6. Roentgenograms of the chest disclosed generalized enlargement of the heart and accentuation of vascular markings in both lung fields. An intravenous pyelogram demonstrated poor function bilaterally but was otherwise noncontributory. A retrograde pyelogram failed to demonstrate any abnormality of the upper urinary passages.

Soon after the patient was admitted to the hospital, it became apparent that he was unable to void more than a few cubic centimeters of urine; catheterization on the following morning produced only 10 cc. An anuria regimen was begun, and the patient was digitalized. An electrocardiogram after digitalization revealed that the rhythm had been converted to auricular fibrillation with an average ventricular rate of 70; the T waves were flat in Lead 1, upright in Leads AVL, V_2 and V_3 and diphasic, with sagging ST segments, in Leads 2, 3, AVF, V_4, V_5 and V_6. During the next six days the patient failed to excrete more than 100 cc. of grossly bloody urine in a twenty-four-hour period. On the fourth day the nonprotein nitrogen was 138 mg. per 100 cc., and the potassium 6.9 milliequiv., and the carbon dioxide 23 milliequiv. per liter. Chemical examination of the urine was negative for mercury. On the eighth day the nonprotein nitrogen was 208 mg., the phosphorus 11.5 mg., and the calcium 7.9 mg. per 100 cc.; the sodium was 119.7 milliequiv., the chloride 90 milliequiv., and the potassium 7 milliequiv. per liter. On this day he had two brief episodes of generalized twitchings, became somewhat drowsy and then suddenly became pulseless and cyanotic; the heart sounds were not audible, but respirations continued for a short time and then ceased.

DIFFERENTIAL DIAGNOSIS

DR. JOHN B. STANBURY*: I should like to ask how long after the patient entered the hospital the intravenous pyelogram was done.

DR. BENJAMIN CASTLEMAN: It was done on the day of admission.

*Assistant physician, Massachusetts General Hospital.

DR. STANBURY: May I see the x-ray films?

DR. CHIU-CHEN WANG: The intravenous pyelogram shows no appreciable amount of dye in the kidneys up to sixty minutes.

DR. STANBURY: Zero filling?

DR. WANG: Yes. The retrograde pyelogram demonstrates normal-sized kidneys in normal position; there is no hydronephrosis or distortion of the pelvicalyceal system of either side. In the x-ray film of the chest, the pulmonary vessels on both sides are severely congested.

DR. STANBURY: Was the chest examination done on entry?

DR. WANG: Yes. There may be some element of pulmonary edema. The heart is prominent in the region of the left ventricle; the aorta is slightly tortuous.

DR. STANBURY: There seems to be no characteristic shape to the heart. Does it have the shape of a rheumatic heart?

DR. WANG: No.

DR. STANBURY: This is a case history of a man in his middle years who entered the hospital shortly after an acute catastrophe somewhere below the diaphragm. Except for a questionable history of constipation and diarrhea, which was treated for a week with bran, he was well until only eight hours before hospital admission, when he was suddenly taken with severe abdominal pain, which was predominantly on the right side. The subsequent course was characterized by oliguria and the rapid development of uremia and death possibly from a terminal episode of ventricular fibrillation. The problem may be best considered as one of acute oliguria. I shall therefore go through the causes of acute oliguria that are conceivable in this patient.

The first cause of acute oliguria that comes to mind is acute glomerulonephritis. The patient did have hematuria, but he had no hypertension and neither other findings nor the clinical picture of acute glomerulonephritis. There was no fever. Acute glomerulonephritis would have to be of a most unusual and severe grade to fit the findings in the protocol.

Another group of diseases worth mentioning comprises the acute infections of the genitourinary tract. The first to be considered is acute severe pyelonephritis. I have never seen a case of pyelonephritis characterized by oliguria of this degree. Furthermore, the patient had no appreciable fever. Leptospinal infections sometimes cause hematuria, oliguria, pyuria and albuminuria, but there were no other findings to suggest a specific leptospinal infection. Others in this group are renal carbuncle and perinephritic abscess.

The Service apparently considered seriously the possibility of a chemical nephrosis because the urine was examined for mercury, but none was found. Many other agents, such as carbon tetrachloride, sulfonamides, arsenic and uranium, will cause a severe nephrosis. There was no history to suggest such a diagnosis here. Furthermore, in general this syndrome is not characterized by hematuria, and hematuria was an important feature in this man's terminal illness. I think I can reasonably dismiss a chemical agent as being responsible here.

Another cause of acute oliguria or anuria is obstruction to the lower urinary passages by such things as tumors and stones. In a retrograde pyelogram no evidence of obstruction was found, and the calyxes were normal, which is further evidence against a urinary-tract obstruction.

Finally, I come to acute vascular disorders that may lead to acute oliguria. Before discussing these in detail I should like to consider the problem of whether the patient had unilateral or bilateral disease. Although the pain was predominantly on the right side, he had oliguria. This brings up the problem of sympathetic oliguria in which acute disease of one kidney such as a vascular accident is accompanied by shut-down of the other. This must be an extremely rare event. I ran across 1 such case.[1] That patient had arterial embolization of one kidney and no shock; there was anuria for eight hours. Subsequently, he passed a normal amount of urine from the uninvolved kidney. The patient under discussion lived for eight days and was oliguric for the whole time. It is difficult for me to conceive of a sympathetic oliguria leading to anuria that, in the absence of shock, would last so long. For this reason and in spite of the fact that the pain was unilateral, I am inclined to believe that he had bilateral kidney disease. This leaves me in a quandary, because I have to explain right-sided pain as resulting from some sort of vascular accident that involved both kidneys.

The first diagnosis that comes to mind is dissecting aneurysm. The patient was in an age group in which he could have had this disease. Dissecting aneurysm usually begins above the diaphragm. This patient's pain was never in the chest. It is conceivable that he had a dissecting aneurysm, but I should expect vascular changes in the legs, which he did not have. Although I cannot exclude dissecting aneurysm, I am inclined to dismiss it.

It is possible also that he had bilateral renal-artery thrombosis — that for some reason both renal arteries became thrombosed. I can readily accept a thrombus of one renal artery but find it difficult to accept simultaneous thrombosis of both renal arteries.

The remaining two possibilities are bilateral embolization in the kidneys and thrombosis of the vena cava involving the renal veins. Both embolization of the kidneys and acute thrombosis of the renal veins may be characterized by severe pain, localized tenderness, leukocytosis, prostration, shock, hematuria and oliguria. On these grounds alone I would not be able to distinguish in this particular

case between bilateral massive embolization and thrombosis of the inferior vena cava.

Several other features of this case warrant mention. One is the heart itself. I was not aware from the protocol that there was as much evidence of heart disease as is present in the film. The patient was in congestive heart failure, with a large heart. I am sure I do not know what the etiology of the heart disease was. It was not rheumatic; it may have been hypertensive with congestive failure. It is even possible that he had a silent infarction of the myocardium. If this were so, a mural thrombus would be a ready site for the embolus. Perhaps emboli of the kidneys came from an auricular thrombus. The patient was having auricular flutter, which changed to fibrillation. It is possible that he had had auricular fibrillation for a long time and that the severe abdominal episode induced a strong vagovagal reflex, which diminished the rate of the auricular circus and changed the rhythm from fibrillation to flutter. It is more probable that the rhythm was changing back and forth from a normal rhythm to fibrillation to flutter and that the change led to the throwing off of multiple emboli, which lodged in the kidneys. Although I cannot make an etiologic diagnosis of the heart disease, I suspect that he had previous hypertension and hypertensive arteriosclerotic heart disease.

Another feature of the patient's illness was the severe hemorrhoids, which he had had for six months. Ordinarily, I should dismiss them but they seem to have been causing him much trouble, with a great deal of bleeding. They raise the question of long-standing thrombosis of the inferior vena cava. When such a thrombosis occurs, it is usually in the presence of infection or tumor. Many of these patients have an associated hypernephroma, which, of course, may be quite silent. I do not think I can make a diagnosis of hypernephroma here. There was a normal retrograde pyelogram. It is also possible that he had some other disease — lymphoma in the mesentery or carcinoma of the pancreas invading the inferior vena cava, gradually thrombosing it and finally involving and obstructing both orifices of the renal veins. The presence of hemorrhoids suggests an inferior-vena-cava syndrome, but the lack of edema of the legs is against it. The collateral circulation in infracaval thrombosis is usually greater laterally on the abdomen, whereas in portal-vein thrombosis it is usually more central, as with the caput Medusae.

The third set of important findings is the electrolytes. I assume the blood specimens on admission were drawn at the time of entry. If they were, the high phosphorus and the low calcium developed within eight hours. That seems impossible. I think it can only mean that the patient had renal disease of long standing — longer than the eight hours. I do not believe there can be an appreciable depression of blood calcium, increase in blood phosphorus and this much increase in the nonprotein nitrogen only eight hours after impairment of renal function. I think that he had old hypertensive arteriosclerotic heart disease and congestive failure, and that he probably had a fairly severe degree of nephrosclerosis. I am left with venous thrombosis versus arterial embolization to explain the acute episode; I cannot with any certainty choose between them. Knowing that he was having changing cardiac rhythms and not being able to make a diagnosis of infracaval syndrome, I shall choose bilateral arterial embolization of the kidneys, possibly from a ventricular mural thrombus but more probably from a thrombus in the fibrillating left auricle. There was probably more renal infarction on the right side, perhaps with perirenal extravasation of blood.

DR. FLETCHER H. COLBY: I saw this patient in consultation. It seemed to me — in the absence of any toxic agent causing a lower-nephron nephrosis, with kidneys that were barely functioning, if functioning at all, and with normal retrograde pyelograms — that, as Dr. Stanbury summed up so well, this patient must have had serious lesions of the vascular system of the kidney.

DR. ALEXANDER LEAF: My impression when I saw this patient was that he had suffered a vascular catastrophe affecting the renal circulation. The cardiac arrhythmia afforded a likely source for emboli; however, it was very difficult to me to visualize bilateral renal arterial emboli with no evidence of other emboli to the lower extremities. Unilateral occlusion of one renal artery, with "reflex" or "sympathetic" anuria on the contralateral side, was considered. What little experience I have had with "reflex" anuria and what little I could find in the literature had led me to consider "reflex" anuria as a transient state lasting twelve to twenty-four hours at the most.

DR. LEWIS KANE: How do you explain the large number of white cells compared to the few red cells in the urinary sediment? It suggests the possibility of overwhelming infection of the kidneys, possibly associated with necrotizing papillitis.

DR. STANBURY: I do not know whether they were all white cells or whether they were epithelial cells.

DR. CASTLEMAN: With infarction, epithelial cells may slough off.

DR. STANBURY: Yes; and many of them may be called white cells.

DR. JOHN T. QUINBY: How did you explain the sudden onset of severe generalized abdominal pain?

DR. STANBURY: Severe generalized abdominal pain may be present with occlusions of renal veins or massive arterial embolization of the kidney. Emboli may be very silent, but they are often associated with severe pain, leading to shock. I suppose the pain is due to swelling of the kidneys.

DR. QUINBY: What did you think was against dissecting aneurysm in the patient?

DR. STANBURY: One fact was that the physical findings in the legs were normal. I could not exclude it with certainty.

CLINICAL DIAGNOSIS

Dissecting aneurysm of aorta with thrombosis of renal arteries. (Dissection into arch and pericardium.)

DR. STANBURY'S DIAGNOSES

Bilateral embolization of kidneys from atrial thrombi.
Nephrosclerosis, severe.
Arteriosclerotic and hypertensive heart disease.

ANATOMICAL DIAGNOSES

Arterial embolization and infarction, right kidney.
Lower-nephron nephrosis (ischemic nephrosis).
Coronary arteriosclerosis and myocardial fibrosis.
Mural thrombi, both auricles.
Cardiac hypertrophy.

PATHOLOGICAL DISCUSSION

DR. CASTLEMAN: Autopsy showed an enlarged heart weighing 440 gm. without any changes in the valves and with mural thrombi in both auricular appendages, which would confirm Dr. Stanbury's suggestion that the arrhythmia had produced mural thrombi. The coronary arteries were narrowed to about a fourth of their normal caliber, and there was a great deal of myocardial fibrosis due to the coronary-artery disease.

DR. GORDON MYERS: Was not the left ventricle quite thickened?

DR. CASTLEMAN: Yes; it was quite hypertrophied. It measured 30 mm. The patient may well have had hypertension in the past.

The right kidney was infarcted, the embolus almost certainly coming from the left auricle. In the gross we thought the whole kidney was infarcted, but microscopically we did find small areas that were still viable. The left kidney was not infarcted at all but grossly appeared swollen. Microscopical sections of the left kidney and the noninfarcted areas of the right kidney presented a similar picture of a tubular disease. The tubules of Henle's loops and the distal nephrons showed all stages of epithelial necrosis and were plugged with casts, which were calcified in many places. There were no changes in the glomerular tufts or in the proximal convoluted tubules. Calcified casts make one think of mercurial poisoning, but the fact that the proximal convoluted tubules were normal rules that out completely. In mercury intoxication the changes are always in the proximal convoluted tubules. This slide, a Schiff reaction, shows the basement membrane of an involved tubule; in many places the basement membrane is intact but in other places it is entirely destroyed, with liberation of some of the material through the tubules and the setting up of a reaction in the interstitial tissue. This is the appearance of a lower-nephron nephrosis, or what Oliver[2] prefers to call an ischemic, in contrast to toxic, nephrosis. In the toxic type the basement membrane as a rule is preserved, and the epithelial cells regenerate. Since there was no gross evidence of ischemia, so far as we could tell, in the left kidney, how then can we explain these microscopical changes?

The only explanation we have is that this may have been one of those rare cases in which the "shock" produced by infarction of the right kidney leads to spasm of the left renal artery and of the left kidney. We sent a slide of the kidney with the clinical and pathological data to Dr. Jean Oliver, but he was unable to offer any other explanation. Why there was calcification within the tubule is still unsettled. We know that calcification of necrotic debris takes place in tubules, and it may occur rapidly. Our only explanation is that the combination of metabolic changes and the necrotic debris in the tubules in the presence of an alkaline urine allowed for the calcification. We consulted some of the internists interested in renal disease but they have no other explanation of the calcification.

DR. LEAF: One can only speculate regarding the ischemic nephrosis found bilaterally at post-mortem examination, and I think Dr. Castleman's explanation seems most probable. If systemic shock can produce sufficient ischemia to cause this renal lesion, profound vasoconstriction might reduce blood supply sufficiently to induce a similar lesion. If this, in fact, was the pathogenesis and if the exact diagnosis could have been established ante mortem, one wonders if this was not the rare patient who might have benefited from sympathetic-nerve block. By stopping the intense reflex vasoconstriction, one could, perhaps, have avoided the acute renal insufficiency.

DR. STANBURY: Do you agree that eight hours after renal nonfunction is much too soon to see changes in the calcium and phosphorus?

DR. JOHN D. CRAWFORD: I was struck by the apparent change in the calcium. A slightly elevated nonprotein nitrogen and serum inorganic phosphorus might be indicative of changes that had been going on for a long time without symptoms.

DR. CASTLEMAN: We found no evidence that it was long standing from an anatomic point of view. I think the calcium and phosphorus determinations were probably done twenty-four hours rather than eight hours after admission, but even that is a short period. The nonprotein nitrogen on admission was slightly elevated.

DR. WANG: What were the findings in the lung?

DR. CASTLEMAN: Edema and congestion only.

DR. STANBURY: Was there any history of hypertension?

DR. CASTLEMAN: We could not get any such history.

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CASE 38382

Presentation of Case

A sixty-four-year-old man was admitted to the hospital because of inability to talk.

He was seen in the Out Patient Department three weeks before entry because of stiffness of the arms and legs and some difficulty in speaking. One week later, when he returned to the Out Patient Department, the following physical findings were noted: a right-facial nerve weakness, dragging of the right foot, increased tendon reflexes on the right with a right Hoffmann reflex, equal hand grips and a blood pressure of 160 systolic, 90 diastolic. He improved somewhat, remained ambulatory and had no difficulty other than the dragging of the right foot. Three hours before admission he suddenly pointed to his throat and made mumbling sounds, but was unable to form words; he also had some clumsiness when he attempted to put on his clothes to come to the hospital.

Physical examination revealed an obese, aphasic man. The fundi and ocular movements were normal. There was a questionable left hemianopia. There were paralysis of the right lower facial nerve, spasticity of the right arm with partial paralysis and a Hoffmann reflex, and paresis and spasticity of the right leg; there was plantar extension on the right. Increased anteroposterior diameter of the chest with scattered coarse rales at both bases, more marked on the right, was noted. The remainder of the examination was noncontributory.

The temperature was 100°F., the pulse 108, and the respirations 22. The blood pressure was 140 systolic, 70 diastolic.

Urinalysis was negative. Examination of the blood showed a white-cell count of 10,800, with 88 per cent neutrophils, and a hemoglobin of 18 gm. per 100 cc. The nonprotein nitrogen was 30 mg. per 100 cc. A blood Wassermann test was negative. Lumbar puncture revealed clear spinal fluid under a pressure equivalent to 130 mm. of water, with normal dynamics; the fluid did not contain any cells. A roentgenogram of the chest showed the heart to be at the upper limits of normal in size, with some prominence of the left ventricle. The aorta was elongated and tortuous. The lungs were emphysematous. An electrocardiogram revealed a sinus tachycardia of 130, a PR interval of 0.16 second, a QRS interval of 0.07 second, normal voltage and axis with tendency to right-axis deviation, and some clockwise rotation. There were low P waves in Leads 2 and 3 and low T waves in Lead 3.

On the day of admission the patient had a generalized convulsion. A lumbar puncture at this time revealed a clear spinal fluid under a pressure equivalent to more than 100 mm. of water. The fluid contained 4100 cells per cubic millimeter; of these, 2300 were white cells, 95 per cent of which were neutrophils, and the protein was 430 mg. and the sugar 139 mg. per 100 cc. No organisms were seen on a gram-stained smear.

Between episodes of increased spasticity and forced grasping of both hands the patient had bouts of extensor rigidity. A bilateral plantar extensor response developed. On the second day burr holes were made, with evacuation of a subcortical clot in the left temporal lobe. At operation there was normal pressure in the right ventricle; fluid from the ventricle contained 3200 cells per cubic millimeter, of which the majority were red cells, and 10 were neutrophils. Postoperatively, he continued to have intermittent extensor fits, with a temperature spiking to 105°F., pulse of 140 and respirations of 50. Lumbar puncture seven hours postoperatively revealed a low spinal-fluid pressure, with turbid, xanthochromic fluid that gave a ++++ Pandy reaction; the fluid contained 2300 cells per cubic millimeter (92 white cells, 95 per cent of which were neutrophils). Postoperatively, the respirations were regular and deep at a rate varying between 20 and 30 per minute, with occasional bouts of Cheyne-Stokes respiration. The neck was not stiff. The eye movements were not abnormal except for an occasional side-to-side conjugate movement. The pupils were equal in size and reacted to light. The corneal reflexes were intact. There was no rigidity of any extremity and no response to pinprick. Deep tendon reflexes were present and equal on both sides except for slight accentuation of the right knee jerk. The plantar reflex was flexor on the left and extensor on the right. The patient continued in coma with hyperthermia and died on the third hospital (first postoperative) day.

Differential Diagnosis

Dr. Maurice Victor*: The clinical features requiring explanation that appear to be of importance in arriving at a diagnosis may be summarized as follows. The patient was a normotensive, elderly man, who was well until his present illness. The general physical examination was negative, except for mild emphysema and tortuosity of the aorta. The present illness, apparently of three weeks' duration, was subacute in onset and characterized by a right spastic hemiparesis and probably aphasia, although the description of the speech defect does not allow me to say this with certainty. These symptoms were mild and not disabling until three hours before admission, when there was a sudden increase in the aphasic disorder, without impairment of the state of consciousness. The only significant spinal-fluid abnormality at the time of admission was a protein of 51 mg. per 100 cc. On the second hospital day the patient had a generalized convulsion. The spinal fluid now showed 2400 white cells per cubic millimeter, mainly polymorphonuclear leukocytes, about 1500 red cells and a markedly elevated protein and sugar. From

*Assistant in neurology, Massachusetts General Hospital.

this time onward deterioration was swift and progressive, with increasing coma, hyperthermia, fluctuating extensor postures of the legs and death on the third hospital day. After the second lumbar puncture and probably prompted by the hope of discovering an abscess, the surgeons made burr holes and evacuated a subcortical blood clot from the left temporal lobe. This procedure did not seem to influence the course of the illness one way or another.

There can be no doubt, from even a cursory glance at the case history, that the patient suffered from a serious neurologic disease, to account for both his initial illness and his death. The precise neurologic disturbances and then sequential development remain to be explained.

Two ways of tackling this problem suggest themselves. The usual methodology that one employs in arriving at a neurologic diagnosis seems in this case to be superfluous. The necessity of translating symptoms and signs into anatomic and then pathological terms is largely precluded by the report of the surgeons' findings at operation. The fact is that there was a hematoma in the left temporal lobe; this information seems indisputable. I may therefore use this fact as the starting point of my discussion, and attempt to work the other historical data, signs and laboratory findings into a single feasible diagnosis.

There are only a few conditions that are capable of causing a hematoma in the temporal lobe. Trauma, spontaneous cerebral hemorrhage and bleeding from an aneurysm, from an arteriovenous malformation or from a tumor would all have to be considered.

Trauma is mentioned first, only because it can be dismissed most readily. There was no history of injury; conceding that the injury might have been trivial or overlooked, one would expect that a subcortical clot would have produced its maximal disturbance at the onset of the illness rather than three weeks after it began. The presence of a subdural hematoma need concern us no further — it would have been quite unlikely from the clinical data alone, and was excluded with certainty at the operation.

Next, one must exclude a spontaneous cerebral hemorrhage. It is the final episode of the illness, starting suddenly with a convulsion and progressing steadily to coma and death, that suggests this diagnosis. The three-week illness that preceded the hospital admission, characterized by a mild hemiparesis alone, remains unexplained. Furthermore, this man was normotensive, the hemorrhage was in the white matter of the temporal lobe, and when he was first seen the spinal fluid was under normal pressure and contained no red cells. All these features are quite unusual for spontaneous cerebral hemorrhage, which is predominantly a disease of patients with severe hypertension, usually affecting the central gray masses of the brain, with a bloody spinal fluid under increased pressure, and progressing relentlessly from the time of its first manifestation.

Similarly, only a weak case can be made for hemorrhagic infarction of the brain due to embolism. A source of emboli is not apparent. If the discrete episodes in the course of the illness are regarded as the effects of repeated embolism, it is unusual that they should all lodge in the same portion of the nervous system.

Could this possibly represent bleeding from an aneurysm or arteriovenous malformation? The three stages in the illness — namely, the three-week period of mild hemiparesis, the sudden episode of aphasia and the final episode of convulsion, coma and death — could have resulted from separate bleeding episodes. Again, however, a bleeding aneurysm would explain only one aspect of the illness, and I should have to overlook a group of clinical features that one ordinarily considers essential in making such a diagnosis. The first and second episodes were not accompanied by headache, clouding of consciousness, signs of meningeal irritation or subarachnoid hemorrhage. There are, of course, cases in which the aneurysm is set deep in the Sylvian fissure and, on rupturing, bleeds into the cerebral white matter as well as into the subarachnoid space, or even predominantly into the brain. This is the so-called meningocerebral hemorrhage. However, in the case under discussion there is no evidence from the clinical or laboratory data on the initial examination that there was any subarachnoid blood. Meningocerebral hemorrhage without a trace of subarachnoid blood is certainly outside the limits of my experience, and therefore I could not propose this diagnosis with any degree of confidence.

Finally, one must consider the possibility of bleeding from a tumor of the brain. It should be stressed that neoplasm presenting symptoms of apoplexy is a rare phenomenon. Yet it is a well recognized pathologic state, and worth considering for several reasons. In this case I must explain not only an obvious and terminal apoplexy but also a group of signs that preceded the final episode — namely, a mild hemiparesis, progressive aphasia and elevation of the spinal-fluid protein. The various other causes of cerebral hemorrhage, though statistically far more common than neoplasm, fail to account for both phases of the illness.

Brain tumors that may be complicated by hemorrhage include glioblastoma, chorioepithelioma, hypernephroma and, very rarely, medulloblastoma. There is nothing in the record to indicate that this patient was harboring a tumor elsewhere than in the brain; the likeliest tumor to be implicated in this case would therefore be an infiltrating glioma.

A final word of explanation is required regarding the spinal fluid. On entry to the hospital there were no cells and only a slightly elevated protein content. One day later, after the seizure, the fluid

contained 2400 white cells, mainly polymorphonuclear leukocytes, 1500 red cells, 430 mg. per 100 cc. of protein, and 139 mg. per 100 cc. of sugar. Cultures grew out nonhemolytic streptococci. There are very few pathologic states capable of thus transforming the spinal fluid within one day. The possibility of a ruptured abscess at once suggested itself, and was excluded when the surgeon evacuated a hematoma. Aside from the operative findings, the evidence for abscess was slight. There was no history of a past illness that could be interpreted as the "invasion period" of the abscess; there was no obvious source of abscess such as infected ears, sinuses or lungs. Nor was the spinal-fluid formula prior to suspected rupture particularly characteristic of abscess — one would have expected a few lymphocytes and a protein in excess of 51 mg. per 100 cc.

A simpler explanation for the purulent spinal-fluid findings suggests itself, although it would be difficult to prove this point — that is, the infection was actually not part of the basic disease, but was introduced at the first lumbar puncture. Meningitis is a well recognized complication of diagnostic lumbar puncture and spinal anesthesia. The organism, most often introduced in this manner is *Pseudomonas aeruginosa* (*Bacillus pyocyaneus*), but many other organisms have been implicated, including nonhemolytic streptococci.

My diagnoses are glioblastoma multiforme of the left cerebral hemisphere, with terminal hemorrhage and iatrogenic purulent meningitis.

Clinical Diagnosis

Cerebral hemorrhage, left temporal lobe.
?Basilar artery thrombosis.
?Brain abscess.

Dr. Victor's Diagnoses

Glioblastoma multiforme, left cerebral hemisphere, with terminal hemorrhage.
Iatrogenic purulent meningitis.

Anatomical Diagnosis

Glioblastoma multiforme, left cerebral hemisphere, midbrain and pons, with hemorrhage.

Pathological Discussion

Dr. Edward P. Richardson, Jr.: In his excellent discussion of this case, Dr. Victor has arrived at the correct diagnosis. The significant post-mortem findings were confined to the brain. On external inspection, the left cerebral hemisphere was enlarged as compared with the right, and its convolutions were flattened. Furthermore, the left cerebral peduncle and left side of the base of the pons were widened. Sections of the brain disclosed a deeply situated, infiltrating tumor in the white matter of the posterior limb of the internal capsule and of the posterior part of the temporal lobe. Within the tumor were irregularly scattered foci of necrosis and hemorrhage, and lateral to it there was a large intracerebral hemorrhage, which had been surgically entered from the surface (Fig. 1). Similar tumor tissue was found in the left cerebral peduncle and in the left half of the pons.

Microscopical examination showed the tumor to be a densely cellular neoplasm in which some of the cells resembled well differentiated astrocytes, whereas others were pleomorphic and totally undifferentiated surrounding grossly visible, dense masses of tumor cells. The brain tissue was infiltrated by neoplastic cells for a considerable distance. There were numerous large vascular channels within the tumor, frequently surrounded by extravasations of fresh red blood cells, and the blood in the large hemorrhage appeared fresh.

This obviously malignant tumor, of which the basic cell type is the astrocyte, is generally classified as glioblastoma multiforme. These tumors, rapidly growing and infiltrating, are often extremely vascular and contain numerous fragile blood vessels, in association with which small or microscopic hemorrhages are a common finding. It is, however, most unusual for them to be associated with massive cerebral hemorrhage, as occurred in this case. It should be emphasized that brain tumor in general is a very rare cause of extensive bleeding into the brain. There was no evidence either grossly or microscopically of meningitis. Dr. Victor's explanation of the leukocytes in the cerebrospinal fluid cannot now be proved or disproved. It is possible that accidental infection of the subarachnoid space occurred at the time of the first lumbar puncture and that this cleared up under antibiotic treatment.

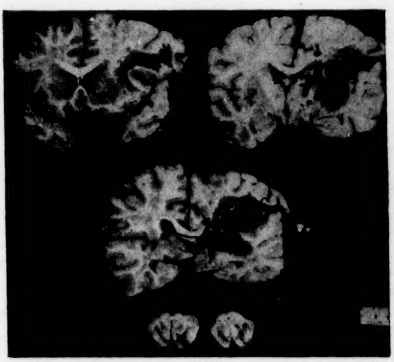

Figure 1. *Sections of Cerebral Hemispheres and Midbrain. Arrows point to the tumor in the posterior part of the left hemisphere and in the left cerebral peduncle, lateral to which is the hemorrhage.*

The New England Journal of Medicine

Formerly

The Boston Medical and Surgical Journal

Established 1828

Official Organ of
THE MASSACHUSETTS MEDICAL SOCIETY
and
THE NEW HAMPSHIRE MEDICAL SOCIETY
OWNED BY THE MASSACHUSETTS MEDICAL SOCIETY AND PUBLISHED WEEKLY UNDER THE JURISDICTION OF THE COMMITTEE ON PUBLICATIONS

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MICROFILM volumes available to regular subscribers through University Microfilms, 313 N. First Street, Ann Arbor, Michigan.

MATERIAL, other than original articles, should be received not later than noon on Thursday, three weeks before date of publication.

THE JOURNAL does not hold itself responsible for statements made by any contributor.

COMMUNICATIONS should be addressed to the *New England Journal of Medicine*, 8 Fenway, Boston 15, Massachusetts. Telephone KE 6-2094.

REPORT ON BRITAIN'S HEALTH SERVICE

ELSEWHERE in this issue of the *Journal* will be found a report on the background to Britain's Health Service, without a knowledge of which a clear understanding of the problems involved is impossible. The author is Dr. Hugh Clegg, editor of the *British Medical Journal* and an able interpreter of the policies of the British Medical Association.

Much has been written about the National Health Service, and, as Dr. Clegg says, much of it has been propaganda on both sides of the controversy. The arguments for and against the Service reached their greatest height and their greatest heat between the time of the appointment of Aneurin Bevan as minister of health in 1945 and the effective date of the Acts in 1948; actually the appointment of Mr. Bevan was only an episode, even if an explosive one, in the long story of the socialization of medicine in Britain. To evaluate the Service properly it must be viewed against its historical background and the circumstances that gave rise to it. It was not an isolated experiment, noble or otherwise. It was part of the social and economic pilgrimage that Britain set out upon over a century ago, as an almost inevitable result of her industrial revolution and the machine age that had its beginning with power-driven machinery and mass production.

Britain's system would certainly not suit the America of today nor probably the America of any discernible future, yet it is hard to see how Britain would have managed to deliver even passable medical service to a majority of her population without some kind of governmental intervention. It is heartening to believe that although methods may vary, "certain principles are fundamental to the practice of medicine in civilized countries." As the editor of the *British Medical Journal* writes, "The very fact that the World Medical Association exists is an outward recognition that the doctors of the world have common ideals and a common purpose." The ideals of the profession, he believes, guarantee its integrity against political assault; perhaps even against economic disaster.

The National Health Service of today actually had its beginnings in the Reform Bill of 1832 and the Poor Law Amendment Act of 1834. The latter was the result of the report of Edwin Chadwick — Lemuel Shattuck's prototype — on "The Sanitary Conditions of the Labouring Population of Great Britain," which brought out the relation" between poverty and ill-health, and between ill-health and unsanitary conditions." From that time on, Britain's history reveals a succession of acts passed with the design of ameliorating the living and working conditions and improving the health of Britain's crowded millions.

As the result of such conditioning influences, compulsory health insurance was adopted by Lloyd George's Liberal Government in 1911. With the passage of this legislation the state, from being primarily concerned with public health, invaded the field of personal health. It is the constant danger

of such encroachment that makes the physician in our own country today fearful of the broadening field of public health, for it is one of the fundamental attributes of government that it must always seek to increase its own authority.

The governed too, come readily to rely more and more on their government. The British Medical Association, at first opposed to the National Health Insurance Act, soon came to approve it and even urged its extension to include workers' families; by 1939 the Association was advocating a "state-provided comprehensive medical service" for 90 per cent of the population.

New wars raised new necessities, and in 1940 the British Medical Association in conjunction with the Royal College of Physicians and Surgeons and others formed a Medical Planning Commission:

> to provide a system of medical service directed towards the achievement of positive health, of the prevention of disease, and the relief of sickness; and to render to every individual all necessary medical services, both general and specialist and both domiciliary and institutional.

Soon thereafter came the Beveridge Report, drawn up for and accepted by Churchill's Coalition Government, with its plan for social security from the cradle to the grave. The B. M. A. had previously insisted that 10 per cent of the population, able to pay for its medical care, should do so. Even this reservation was abandoned when the report was adopted.

Mutual understanding and the peace that passeth it were apparently on the way when the Labor Government brought Mr. Bevan into the seats of the mighty in 1945. Mr. Bevan, apparently cordially disliking doctors, soon aroused a reciprocal emotion, particularly when he insisted on abolishing the sale of practices and advocated a full-time salaried state medical service. He was top brass, however, and the whirlwind that he sowed brought the wind only as its crop.

With the return of relative conservatism, however long it may last, some of the pressure has been removed. The Service is pulling itself together and is functioning more smoothly, health in general is as good as might be expected, the teaching hospitals are full of students, and research is going forward.

Although much will depend on the future economic position of Britain, the policy of the profession is now to improve the Service and to enlarge in it the "area of freedom" by attempting to curb "the ambitions of the politician and the proliferating tendencies of the administration."

THE REFUGEE PHYSICIAN

Alex. M. Burgess, elsewhere in this issue of the *Journal*, presents the problem of the "medical refugee" in the United States in this parlous period of history. Although the resettlement of physicians — whose training and the basic principles of whose profession are common to all civilized countries — should be the simplest of all resettlement problems, the barriers of state regulating boards make it actually one of the hardest to accomplish.

The functions of state boards of registration in medicine have obviously been developed over the years to protect the public from the ministrations of inadequately trained physicians; there may also be some justification for the suspicion that in some instances the protection of home talent may play too heavy a role.

To help the problem of finding a place for the deserving physician of foreign origin who has reached these shores, the National Committee for Resettlement of Foreign Physicians was formed in 1949 as a development of a previously functioning informal committee of New York doctors. It is supported entirely by the United Jewish Appeal, although its work is nonsectarian and in recent years has been directed toward resettlement of physicians who are predominantly non-Jewish.

The greatest practical difficulty in helping these physicians is the patent inadequacy in the training of so many of them, owing to the disintegration of medical education in Europe after the beginning of the war. This lack made necessary the rule adopted by most state licensing boards not even to admit to examination the graduates of any but a few selected foreign schools, who obtained their degrees subsequent to 1940. The Council on Medical Education and Hospitals of the American Medical Association, as previously noted in these columns,* has made a great and continuing effort to investigate and list the schools whose graduates it considers to be ac-

*Editorial. Recognition of foreign medical schools. *New Eng. J. Med.* 242:765, 1950.

ceptable for examination. This list is constantly growing.

The regulations relative to the examination of refugee physicians vary among the states, but are announced by Dr. Burgess, as chairman of the National Committee for Resettlement of Foreign Physicians, to be particularly oppressive in Pennsylvania and Massachusetts, where "certain special regulations" block the admission to practice of many physicians who might otherwise be qualified. Most onerous of all is said to be the rule of the Massachusetts board that every foreign physician must present, in addition to his other credentials, a statement signed by the *present* dean of his medical school to the effect that he is a bona-fide graduate of that school. The impossibility, in many cases, of obtaining such a statement is apparent and would make Massachusetts, for certain physicians, a never-never land so far as practice is concerned, regardless of the shortage of trained physicians in the Commonwealth.

It might seem to many Americans that the war was truly only partly won if any number of oppressed foreigners who were liberated at the cost of so much sweat and blood are unjustly denied the benefits of that freedom in which America takes such pride.

JUVENILE DELINQUENCY

MUCH has been said and written about the prevalence of juvenile lawlessness in the ruined cities of Europe, and there has been a growing awareness of the increased hoodlumism in American centers of population. Recent reports indicate that this extension of antisocial behavior has reached alarming proportions with large numbers of teen-age children having organized themselves, like predatory animals, into packs apparently bent on destruction, and governed only by the crudest codes of brute behavior. These groups are responsible not only for destruction of property but for robbery and crimes of violence.

This form of juvenile delinquency has increased so rapidly in Metropolitan Boston that United Community Services, through its Group Work Divisional Committee, has started a special study of the problem. Its causes are believed to be social tensions — although not usually racial or religious in character, overcrowded living quarters and broken or inadequate homes with consequent neglect of the individual, who finds the street the only place to which he can escape. Here he is exposed to a gradual gang system in which he enters a "kindergarten" group at six or seven years of age, and moves from one level to another until he is in his twenties. By that time, as a result of thoroughly bad influences, sometimes with periodical sojourns in reform schools that do not reform, he has become completely indoctrinated in a life of crime.

For correction, adult leadership and supervision are suggested, as a parent substitute or as an aid to parental efforts where such efforts are being made. The church must play its part, and strong moves must be made to re-establish the effectiveness of the school, which has gone down immeasurably since the war. Facilities for recreation must be provided, but most essential will be an increase in the number of trained mobile staff workers to go regularly into the neighborhoods and infiltrate the sectors where juvenile vice is bred.

Mankind has always turned easily to violence, and gentleness may be said to be an acquired character. For nearly forty years mankind has camped beside the training fields of violence; where the wind has been sowed, the whirlwind will be the harvest.

NOW THAT SEPTEMBER'S HERE

CLUSTERED about the autumnal equinox, the usual meetings of the minds occur to usher in the season's anticipated display of medical erudition. "Oh, to be in New England," as Browning might have written it, "now that September's here."

Already, in New England, the combined session of the New Hampshire and Vermont State medical Societies has taken place at Bretton Woods, not the least of the conferences that have been held at that celebrated spa; the Springfield Academy of Medicine has opened its current season, and the Bay State's district medical societies have launched their busy programs. In no way is this gala opening intended to compete with the first Argentine Congress of Thoracic Surgery, now drawing to its close; sufficient unto each hemisphere are the seasons thereof, and spring is on the way down under.

Next week three significant meetings of more than passing interest are scheduled for New England. On September 24 the United Cerebral Palsy Association of Massachusetts will conduct its fall institute at the Children's Medical Center and the Massachusetts Academy of General Practice will hold its clinical assembly at the Center and the Hotel Statler in Boston. The program will be found on another page. On the same date, continuing through September 26, a New England Tuberculosis Conference will be held at the Eastland Hotel, in Portland, Maine, under the auspices of the Massachusetts Tuberculosis and Health League, Incorporated, the Maine Tuberculosis Association and the Maine Trudeau Society. The theme for this conference, which should be attended by all persons interested in tuberculosis control, will be "the tuberculous patient and his problems."

On the Ill. River bilious fever is alarmingly fatal. — In Scott county, Missouri, cholera is fearfully destructive. — Cases of yellow fever are announced in Charleston, S. C. — People are injuring themselves by drinking too much soda water.

Boston M. & S. J., *September 22, 1852*

OBITUARY

WILLIAM F. LYNCH, M.D. (1879–1952)

Dr. William F. Lynch died on May 2.

He was born in East Weymouth, Massachusetts, of Irish immigrants, the youngest of six children. He was educated in the local schools of East Weymouth, and graduated from Georgetown University in 1904 and Harvard Medical School in 1908.

He went to Worcester immediately after receiving his medical degree and became closely associated with St. Vincent Hospital, first as an intern, then as resident and later as an active member of the surgical staff.

In 1922 he married Mary A. Gibbons of Clinton, Massachusetts, a graduate nurse of St. Vincent Hospital.

He was a member of the American Medical Association, the Massachusetts Medical Society and the Worcester District Medical Society (of which he was a past president) and the New England Surgical Society, a charter member of the New England Cancer Society, a Fellow of the American College of Surgeons and a member of the founders' group of the American Board of Surgery.

He loved his hospital, and his devotion to the Sisters of Providence knew no bounds. As one would protect those dear to him, so did Dr. Lynch, wise in counsel and firm in his convictions, endear himself to the Sisters he loved.

Never forgetting his humble origin, he constantly extended a helping hand to interns and residents who came to the hospital. Many learned that beneath his apparent roughness and frequent chastizing there was a heart of gold and sympathetic understanding. Many of the "little fellows" received attention and consideration from him when a helping hand at that time was like a beacon of light in the darkened harbor of a young man's professional life.

Dr. Lynch's unusual knowledge of current literature and most recent periodicals attested to his interest in scientific progress and his desire to remain young. Among his personal papers the following poem was found:

If you have left your dreams behind
If hope is cold
If you no longer look ahead
If your ambitious fires are dead
Then you are old
But if from life you take the best
And if from life you keep the zest
If love you hold
No matter how the years roll by
No matter how your birthdays fly
You are not old

MASSACHUSETTS MEDICAL SOCIETY

POSTGRADUATE MEDICAL INSTITUTE

The Postgraduate Medical Institute (formerly, the Postgraduate Lecture Course) is sponsored and directed by the Massachusetts Medical Society, with the co-operation of the Massachusetts Department of Public Health, Boston University School of Medicine, Harvard Medical School, Harvard School of Public Health, Tufts College Medical School, Massachusetts Academy of General Practice and other agencies concerned with postgraduate medical education. The cost of the entire course, consisting of 25 two-hour sessions, is $50. An attendance certificate will be issued (the course is recognized for credit by the Massachusetts Academy of General Practice).

The detailed program of the course, which will be given from 3 to 5 p.m. on Wednesdays, October 1 through April 8, is as follows:

October 1. Diagnosis and Management of Congestive Heart Failure.
Mark D. Altschule and Samuel H. Proger.
October 8. The Coronary Patient.
Paul D. White and David Littmann.
October 15. Diseases of the Stomach and Small Intestine.
Sara M. Jordan and others.
October 22. The Patient with Lower Bowel Symptoms.
Franz J. Ingelfinger, Richard Warren and others.
November 5. Evaluation and Management of Patient with Urinary Abnormalities.
W. Richard Ohler, John P. Merrill, George C. Prather and Arnold S. Relman.
November 12. How Vigorously Should the Patient with Hypertension be Treated?
David Ayman, Robert S. Palmer and Reginald H. Smithwick.
November 19. How to Diagnose and Treat the Asymptomatic Pulmonary Lesion
Theodore L. Badger, Donald S. King and Laurence L. Robbins.
November 26. Recent Trends in the Management of Chronic Pulmonary Disease.
Theodore L. Badger, Richard Schatzki and Edward J. Welch.
December 3. Treatment of Diabetes.
Reed Harwood and others.
December 10. Hyperthyroidism and Hypothyroidism.
Earle M. Chapman and Donald S. Fredrickson.
December 17. Common Gynecological Problems.
Langdon Parsons and Christopher J. Duncan.
January 7, 1953. Proper Nutrition in Health and Disease.
Perry J. Culver, Fredrick J. Stare and Harold C. Stuart.
January 14. The Jaundiced Patient.
Chester M. Jones, Richard B. Cattell and Thomas C. Chalmers, Jr.
January 21. Infectious Diseases and Chemotherapy.
Louis Weinstein, C. B. Favour and William M. Schmidt.
January 28. The Recognition of Early Cancer in Office Practice.
Ernest M. Daland and others.
February 4. The Present Status of the Newer Methods for the Treatment of Cancer.
Ernest M. Daland and others.
February 11. What Can Be Done for the Patient with Chronic Joint Disease?
Charles L. Short and Otto E. Aufranc.
February 18. Recognition of Common Types of Back Pain and Discussion of Treatment (Differentiation of the Nerve-Root Syndrome).
Charles H. Bradford, Arthur Thibodeau and others.
February 25. Obstetrics I: (a) Prenatal Care and Immediate Management of Late Pregnancy Complications; (b) Management of Labor, Including Anesthesia and Analgesia.
Crawford H. Hinman, Duncan E. Reid and others.
March 4. Obstetrics II: Care of the Newborn and Management of Diseases of the Neonatal Period.
Crawford H. Hinman, James Marvin Baty and Stewart H. Clifford.
March 11. Hematology.
Joseph F. Ross and Frank H. Gardner.
March 18. Neurological and Neurosurgical Emergencies.
Joseph M. Foley, Bertram Selverstone and Charles A. Kane.
March 25. Medical Aids for the Physically Handicapped.
Augustus Thorndike, David S. Grice and Eugene E. Record.
April 1. The Recognition and Management of Hypersensitivity Reactions.
Robert P. McCombs and others.
April 8. Metabolic Requirements of Severely Ill Patients.
Francis D. Moore and others.

Sessions will be held in major Boston hospitals. Details regarding auditoriums, parking facilities and telephone service will be available later.

DEATH

Niles — Edward H. Niles, M.D., of Danvers, died on August 19. He was in his eighty-fifth year.

Dr. Niles received his degree from Dartmouth Medical School in 1891. He was the last surviving member of the founders' group of Alpha Kappa Kappa Fraternity.

He is survived by his widow, two daughters and a son.

CORRESPONDENCE

AN APPRECIATION OF DR. HINTON

To the Editor: Accept my congratulations for your editorial, "Retirement of Dr. Hinton," in which you paid such a fine and well deserved tribute to Dr. Hinton for his many world-famous achievements. It would be difficult to exaggerate the services that Dr. Hinton has rendered the medical profession since his graduation as an honor student from Harvard Medical School early in this century. However, the late Dr. Richard C. Cabot told me in 1928 that no hospital in Boston would grant him an internship at the time of his graduation, because of his race. But for his courage, determination and perseverance, his contributions to humanity might have been lost. He succeeded without the benefit of an internship, which is considered essential for every doctor.

I understand that prior to 1931 no Negro physician had been permitted to serve his internship in any hospital in Boston, and early in 1929 no Boston hospital was admitting Negro girls to train for nurses. In that year a small Citizens' committee made a determined and successful effort to place two qualified Negro girls in the Boston City Hospital for training. Two years later the first Negro intern was admitted. Most Boston hospitals, if not all, have opened their doors, and today, will admit qualified young doctors as interns, and qualified girls to train for nurses, regardless of their race. Who can tell what one's potential contribution is, by the color of his or her skin?

William Worthy, M.D.

Boston, Massachusetts

BOOKS RECEIVED

The receipt of the following books is acknowledged, and this listing must be regarded as a sufficient return for the courtesy of the sender. Books that appear to be of particular interest will be reviewed as space permits. Additional information in regard to all listed books will be gladly furnished on request.

Monographs on Surgery, 1952. Edited by B. Noland Carter, M.D., Ph.D., professor of surgery, University of Cincinnati College of Medicine, and director, Surgical Services, Cincinnati Hospital. 8°, cloth, 430 pp., with illustrations. Baltimore: Williams and Wilkins Company, 1952. $12.50.

This third volume of the series contains eleven major topics written by twenty-three specialists on various aspects of surgery. There are six articles on urinary incontinence in the female, four on conditions of the bones and joints, and one on surgery of the large arteries. The various articles are documented with lists of references, and there is a good index. The complete series, akin to a periodical, should be in medical libraries.

Nutrition and Climatic Stress with Particular Reference to Man. By H. H. Mitchell, professor of animal nutrition, University of Illinois; and Marjorie Edman, research assistant in animal nutrition, in charge of literature survey, University of Illinois. 8°, cloth, 234 pp., with 8 illustrations. Springfield, Illinois: Charles C Thomas, 1952. $6.75.

This monograph, which is based on work done for the Quartermaster Food and Container Institute of the Armed Forces, Illinois, surveys the applicable literature to October 1, 1949. The chapters deal with diet in hot and cold environments and at high altitude. The authors recommend further investigations and some changes in feeding practices. The bibliography comprises sixty pages. The book should be in collections on nutrition.

Klinische Elektrokardiographie: Lehrbuch für Studierende und Ärzte. By Dr. Max Holzmann, Zurich. Second revised edition. 8°, cloth, 652 pp., with 302 illustrations. Stuttgart: Georg Thieme, 1951. Ganzleinen DM 69.60. Distributed by Grune and Stratton, New York.

The first edition of this textbook on clinical electrocardiography was published in 1942 and was translated into Italian and Spanish. This new edition has been thoroughly revised, and the subject brought up to date. The principal chapters discuss the normal electrocardiograms, the electrocardiogram in rhythm disturbances, trauma of the heart and other circulatory disorders. The treatment is comprehensive in scope, and there is a good index. The book, which reflects the German point of view, should be in all collections on the subject.

NONCLINICAL NOTES

Dr. Frank N. Allan, of Boston, executive director of the Lahey Clinic and editor of *Diabetes*, was recently elected president of the American Diabetes Association, succeeding Dr. Arthur R. Colwell, of Chicago.

NOTICES

ANNOUNCEMENT

Dr. Marcus Klivansky announces the removal of his office to 27 Nahant Street, Lynn, from 12 Newhall Street, Lynn.

MASSACHUSETTS ACADEMY OF GENERAL PRACTICE

The fall Clinical Assembly of the Massachusetts Academy of General Practice will be held in Boston on September 24.

PROGRAM

9:00 a.m.–12:30 p.m. Children's Hospital. Symposium on obstetrics and pediatrics, with Dr. Lendon Snedeker, Dr. Clement A. Smith and associates. (Special attention to be given to premature babies and the RH factor.)

1:00 p.m. Hotel Statler. Luncheon. Speaker, Dr. Thomas H. Lanman, president of the Massachusetts Medical Society.

2:30 p.m. Hotel Statler. Symposium on arthritis arranged by Dr. William H. Chasen, with Drs. Henry M. Lemon, Joseph M. Looney and Stewart R. Smith. (Amino acid studies, NP factor in rheumatoid arthritis and laboratory studies will be covered.)

4:00–4:45 p.m. Hotel Statler. Business meeting.

5:00–7:00 p.m. Hotel Statler. Cocktail and social hour, followed by dinner meeting. The Honorable John J. Connelly, presiding justice, Boston Juvenile Court, will be the guest speaker.

Wives are cordially invited to attend all sessions — particularly the social hour and dinner.

UNITED CEREBRAL PALSY

The United Cerebral Palsy Association of Massachusetts, Inc., will hold a "Fall Institute" at the Cerebral Palsy Unit of the Children's Medical Center, 35 Binney Street, Boston, on September 25 at 10:00 a. m.

MEDICOMILITARY SYMPOSIUM

A medicomilitary symposium, will be held at the United States Naval Hospital, Chelsea, Massachusetts, October 27, 28 and 29. Physicians and members of allied sciences are invited to attend.

The Chief of Naval Personnel has announced that Reserve Medical Department officers not on the Inactive Status List may be granted retirement point credits on the basis of one point for each day of attendance, provided the session attended is of two hours' duration or longer. Any officer desiring point credit for attendance at the symposium should request appropriate duty orders without pay from the Commandant of his Naval District. A representative of the District Medical Office, First Naval District, will be present to record the names of those attending.

OAK RIDGE INSTITUTE OF NUCLEAR STUDIES

The thirtieth, thirty-first and thirty-second basic courses in radioisotope technics in research will be offered by the Oak Ridge Institute of Nuclear Studies on January 5, February 2 and March 2, 1953.

Application blanks and other information on the one-month courses may be obtained from Ralph T. Overman, chairman, Special Training Division, Oak Ridge Institute of Nuclear Studies, P. O. Box 117, Oak Ridge, Tennessee.

SOCIETY MEETINGS AND CONFERENCES

SEPTEMBER 19. Combined Anesthesia Teaching Conferences of Boston. Page 304, issue of August 21.

SEPTEMBER 19 AND 20. New England Surgical Society. Page 418, issue of September 11.

SEPTEMBER 23. Norfolk District Medical Society. Page 190, issue of July 31.

SEPTEMBER 24. Massachusetts Academy of General Practice. Notice above.

SEPTEMBER 24–26. Massachusetts Tuberculosis and Health League, Inc. Eastland Hotel, Portland, Maine.

SEPTEMBER 25. United Cerebral Palsy Association of Massachusetts, Inc. Notice above.

SEPTEMBER 26–28. Aero Medical Association. Page ix, issue of July 31.

OCTOBER 1. Essex North District Medical Society. Page 226, issue of August 7.

OCTOBER 1–3. Mississippi Valley Medical Society. Seventeenth Annual Meeting. Jefferson Hotel, St. Louis, Missouri. Page xiii, issue of August 21.

OCTOBER 1–3. American Medical Writers' Association. Page ix, issue of July 31.

OCTOBER 1–APRIL 8. Postgraduate Medical Institute. Page 452.

OCTOBER 3, NOVEMBER 18, FEBRUARY 6 AND APRIL 3. New England Society of Anesthesiologists. Page 418, issue of September 11.

OCTOBER 6–17. New York Academy of Medicine. Page xi, issue of July 24.

OCTOBER 8. New England Pediatric Society. Page 338, issue of August 28.

OCTOBER 14. Springfield Academy of Medicine. Page 190, issue of July 31.

OCTOBER 18–23. American Academy of Pediatrics. Page xi, issue of July 24.

OCTOBER 27–29. Medicomilitary Symposium. Notice above.

OCTOBER 28–30. New England Postgraduate Assembly. Hotel Statler, Boston.

OCTOBER 29. New England Obstetrical and Gynecological Society. Annual Meeting. Hotel Somerset, Boston.

OCTOBER 30–NOVEMBER 1. National Association for Music Therapy. Page ix, issue of July 31.

OCTOBER 31 AND NOVEMBER 1. Eastern Section of American Trudeau Society. Page 190, issue of July 31.

NOVEMBER 2–7 AND 10–21. Courses in Laboratory Diagnosis of Tuberculosis. Page 354, issue of February 28.

NOVEMBER 9 AND 10. American Society for the Study of Arteriosclerosis. Page 78, issue of July 10.

NOVEMBER 11–14. American Society of Anesthesiologists, Inc. Third annual refresher course program. The Bellevue-Stratford, Philadelphia.

DECEMBER 7. American Academy of Dental Medicine. Hotel Statler, New York City. Page 338, issue of August 28.

JANUARY 5, FEBRUARY 2 AND MARCH 2, 1953. Oak Ridge Institute of Nuclear Studies. Notice above.

JULY, 1953. International Congress on Medical Librarianship. Page 316, issue of February 21.

DISTRICT MEDICAL SOCIETIES

ESSEX SOUTH

OCTOBER 1. 6:45 p.m. Amesbury Country Club, Amesbury.

MIDDLESEX SOUTH

OCTOBER 29. 11:15 a.m. Mount Auburn Hospital, Cambridge.

NORFOLK

SEPTEMBER 23. Boston Medical Library.
OCTOBER 28.
NOVEMBER 25.
JANUARY 27.
FEBRUARY 24.
MARCH 24.

(*Notices concluded on page xv*)